# HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 15, NO. 1, ABSTRACTS 1-152. JANUARY 1975

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HOSPITAL ABSTRACTS

Vol. 15 January 1975 No. 1

# HOSPITALS IN GREAT BRITAIN

1. CORKILL, B. **Towards a neighbourhood service.** *Nursing Times*, London, 1974, Oct. 3, vol. 70, no. 40, pp. 1552-1554.

A paper published in 1970 [see *Hospital Abstracts*, Vol. 10, Abstract 954] reviewed efforts to integrate health services in the London Borough of Tower Hamlets and proposed the establishment of a network of 'health parishes'. The following year 'neighbourhood' multidisciplinary study groups were set up to foster the development of relations between workers. In all six groups were established and between 70 and 80 people have attended their monthly meetings. Only two groups are still in existence, though their work is nearing completion. A subjective assessment is made of the value of the groups; it is hoped that their work will form a firm foundation on which to build following reorganization of the National Health Service.

2. EARTHROWL, B. and STACEY, M. **Tourism in Wales: a problem for the health service.** *Health and Social Service Journal*, London, 1974, Oct. 19, vol. 84, no. 4409, pp. 2417-2418.

In tourist areas of Wales with a low home population the holiday population may show an increase as high as 85 per cent. In the three types of health service studied (general practitioner services to temporary residents, attendances at hospital accident and emergency departments, and admission of children to hospital) a very real increase in summer work load was recorded for the years preceding the reorganization of the National Health Service. This increase in the burden on the health services is one which warrants the attention of the authorities and could apply equally to other holiday areas in Great Britain. The ratio of home population to tourist beds could serve as an indicator of areas needing special attention.

3. WOODWARD, J. **To do the sick no harm: a study of the British voluntary hospital system to 1875.** London, Routledge & Kegan Paul, 1974, xii, 221, 14pp. £5.50.

This study is concerned principally with the contribution of the general voluntary hospitals in Great Britain to the health of the population during the 18th and 19th centuries. Initially an examination is made of the provision of medical treatment available to the poor until the upswelling of the philanthropic movement to establish voluntary hospitals and dispensaries. Administrative and staffing procedures are studied as a preliminary to looking at the patients and their problems. Three major influences on the chances of survival in hospital are analysed in detail: the admissions policy with regard to fever patients, the number and nature of surgical operations, and the incidence of sepsis.

4. MEDVEI, V. C. and THORNTON, J. L., editors. **The Royal Hospital of St. Bartholomew 1123-1973.** London, St. Bartholomew's Hospital, 1974, 423pp. £7.50

This volume, published to mark the 850th anniversary of the founding of St. Bartholomew's Hospital, has been planned for the general reader. Emphasis in most of the chapters is on the contributions of the physicians, surgeons and others to their respective professions. Individual sections cover: administration; the medical school; medicine; surgery; nursing; other eminent men at St. Bartholomew's; architecture; and treasures. The volume includes 199 photographs and an extensive bibliography.

# HOSPITALS IN OTHER COUNTRIES

5. **The smaller hospital in the health care system.** *Hospitals*, Chicago, 1974, Oct. 1, vol. 48, no. 19, pp. 66-158.

This feature consists of four papers on the problems and difficulties faced by smaller hospitals and case studies of: a health maintenance organization operated by a small hospital; sharing of services in Iowa; emergency services in rural Vermont; sharing of administrative services; preventive care in a small hospital in Washington State; public relations; quality assurance; and pharmacy services.

6. ROBERTS, J. D. T. **Area services management boards.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Oct., vol. 16, no. 10, pp. 16, 18, 20, 22.

The recent report of the Ontario Health Planning Task Force (the Mustard report) suggests a coalescing of hospital and other health facilities to form a comprehensive health service with statutory authority. Area health service management boards would be set up with the following responsibilities: the management of health service institutions in accordance with statutory provisions; administering, and giving leadership to, health services within an area; recommending short- and long-term plans to the district health council; implementing approved plans; and the evaluation of health services by audits and reviews. No suggestions are made as to the composition of the boards or the degree of authority they should have. This paper discusses some of the factors involved.

# PLANNING, DESIGN AND CONSTRUCTION

## HOSPITAL DESIGN

7. RAINS, A. J. H. **Pros and cons of the modern hospital.** *Nursing Mirror*, London, 1974, Nov. 7, vol. 139, no. 19, pp. 54-58.

Using Charing Cross Hospital as an example, this paper examines what a newly built hospital has to offer in terms of design to coincide with current ideas of care and techniques of cure. Care is considered to include all the facilities available for the patient's comfort and peace of mind together with those for supervision by the nursing

and medical staffs. On the cure side the paper considers how design and engineering improve the facilities for the diagnosis and treatment of disease. The pros of the modern hospital are found in those things which contribute to peace and quiet for patients and staff (space, double-glazing, acoustic fittings, quiet lifts) and those things which inspire confidence (daylight, windows, views, hotel atmosphere, wardrobes, plentiful sanitation, electronic communication and space for modern investigation and therapeutic techniques). However, confidence can be shaken by failures of communication, due to planning, which undermine any personal efforts at communication.

8. UNITED STATES. HEALTH RESOURCES ADMINISTRATION. **Minimum requirements of construction & equipment for hospital & medical facilities.** (HEW Publication No. (HRA) 74-4000) Washington, U.S. Government Printing Office, 1974, ix, 77pp.

This publication sets forth the minimum requirements for constructing and equipping projects for which federal assistance is required. It covers: site; equipment; modernization projects; record drawings and manuals; codes and standards; general hospitals; long-stay care facilities; out-patient facilities; rehabilitation facilities; public health centre; and state public health laboratory.

9. GUTTRIDGE, W. A. **Courtyards in hospital planning.** *Hospital Development*, London, 1974, Sept./Oct., vol. 2, no. 5, pp. 34-35.

Courtyards can be oppressive if surrounded by tall blocks. No courtyard should have a daylight angle greater than 45° and the minimum size should be 30 feet square. Some examples are given of recently built hospitals which make good use of courtyards. The acceptance of courtyards in hospital planning has made it possible to develop low, spreadeagled buildings which are economical as regards capital costs but their use on a large scale may lead to heavy maintenance costs.

## DESIGN OF INDIVIDUAL GENERAL HOSPITALS

10. RAB, K. S. **Biggar Union—a small hospital that will be truly different.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Sept., vol. 16, no. 9, pp. 36, 38-39.

The new 32-bed Biggar (Sask.) Union Hospital, was planned by Friesen International, the architects being BLM Architects of Regina. It is intended to have a nursing home and an old people's home nearby connected to the hospital by enclosed walks or underground tunnels. Many of the Friesen concepts already tried out in larger hospitals are being incorporated. These include: (i) centralized materials handling in a supply processing distribution department; (ii) an administrative control centre instead of the traditional nurses' station; (iii) a 'nurserver'—a double-door supply cabinet built into the wall of the patient's room and having 'clean' and 'soiled' compartments; and (iv) mainly single rooms. A combined surgery/delivery suite makes use of two similarly equipped rooms for both functions. Cross traffic is avoided and there are separate corridors for patients and staff. Future expansion will be

possible by adding four private beds to each of the existing 16-bed units. A plan is included.

11. **Art inside, artistic outside.** *Modern Healthcare*, Chicago, 1974, Sept., vol. 2, No. 3, pp. 28-30.

The new 170-bed Cheshire Hospital, Keene, N.H. (architects: The Cannon Partnership, Buffalo, N.Y.) is a six-storey structure which cost $9.1 million. A shell floor provides space for an additional 42 beds in a future expansion. Service and support facilities occupy the ground and first floors. The sloping site has made it possible to have the main, emergency and medical staff entrances on the first floor and supplies and staff entrances on the ground floor. The steel frame has reinforced concrete floors and fireproof materials throughout. The exterior is red brick with aluminium door and window frames and insulating solar bronze glass. Each of the three patient floors has 40 beds in single and double rooms. The intensive care/coronary care unit has 12 single rooms. Features include: carpeting on all nursing floors; an automated trolley transport system; and particular attention to interior design including works of art. Photographs but no plans are included.

12. **Leicester Royal Infirmary project.** *Hospital Development*, London, 1974, Sept./Oct., vol. 2, no. 5, pp. 10-13.

The new Leicester Royal Infirmary will play a major role in the training of medical students of the Leicester University medical school. The phased development (architects: Pick, Everard, Keay and Gimson, of Leicester) began with the completed 156-bed maternity unit which has race-track wards, an antenatal clinic and a special baby care unit. Phase Two (under construction) is a seven-storey block, with 415 surgical and children's beds, 16 operating theatres, out-patient, accident, X-ray, and physiotherapy departments, as well as residences for 636 persons: it should be completed by 1978. Phase Three will include the pathology, physics and physiology departments and is due for completion in 1979. Phase Four will provide 16 wards and other facilities: this should start construction in 1976 and be ready in 1981. The whole will form a comprehensive teaching district general hospital with 1,250 beds. Later phases from 1977 will include 150 beds for long-stay and rehabilitation, 150 psychiatric beds, and a psychiatric out-patient department.

13. GABRIELSON, K.-I. Varbergs nya lasarett. **[Varberg's new hospital.]** *Landstingens Tidskrift*, Stockholm, 1974, Oct., vol. 61, no. 12, pp. 36-41.

This paper is a status report on the first two years of operation of Varberg Hospital opened in 1972 at a cost of s.kr.196,769,000 (£16 million), of which s.kr.172,685,000 (£14 million) were construction costs and s.kr.24,084,000 (£2 million) equipment expenses. The hospital, which stands on a rise 100 feet above the sea, serves an area of 100,000 people with general hospital facilities and at the same time functions as the county psychiatric hospital (population 200,000). There are 759 beds, distributed as follows: psychiatric care, 311; medical, 120; surgical, 120; long-term care 120; obstetrics and gynaecology, 67; admissions (somatic) 10, and intensive care 11. There is a staff of 1,000 of whom over 50 are doctors. There is an exceptionally large recreational area including a swimming bath and sauna for patients and staff. The paper is illustrated with three external and five interior photographs.

## EXTENSIONS AND RECONSTRUCTIONS

14. Plan 74: huvudblocket ommöbleras: ny byggnad för operation. **[Plan 74: rearrangement of the main block: a new building for the operating department.]** *KS-nytt*, Stockholm, 1974, vol. 13, no. 3, pp. 12-22.

The plan for the renovation, reconstruction and extension of the 1,680-bed Caroline Hospital, Plan 74, involves: (i) a concentration of surgical, X-ray and intensive care into a new acute admissions building; and (ii) improvement of the equipment state of the wards and technical services. Reconstruction of the wards is due to start in the summer of 1975, and the new construction should commence some time in 1976/77. By the time construction is complete in the 1980s the number of beds will have been reduced to about 1,470. A certain number of departments will move into other, newer buildings as new accommodation becomes available for the present occupants. Average costs of the enterprise up to 1980 are estimated to be s.kr. 30 million (£3 million) a year. The paper is illustrated with two exterior photographs accompanied by artist's impressions of future buildings on the relevant sites.

## DESIGN OF SPECIAL DEPARTMENTS

15. GREAVES, D. **Operating in 'best buy' Bury St. Edmunds.** *Nursing Times*, London, 1974, Oct. 24, vol. 70, no. 43, pp. 1664-1666.

The operating department at the new West Suffolk Hospital [see *Hospital Abstracts*, Vol. 14, Abstract 1073] consists of six theatre suites which open onto a single linear corridor. At one end is an eight-bedded recovery ward and a four-bedded waiting area. There are also a theatre sterile supply unit, staff rest rooms, pantry and offices. The department is entered through an air lock area or the staff changing rooms. Each suite consists of a theatre, with scrub-up bay, supply room and anaesthetic room. An exit/disposal area is shared between two theatres.

16. GIELEN, B. Der neue Operationstrakt für die Kinderchirurgische Klinik des Zentralkrankenhauses St-Jürgen-Strasse in Bremen. **[New operating suite for the children's surgical unit of the St.-Jürgen-Strasse Central Hospital, Bremen.]** *Krankenhaus*, Stuttgart, 1974, Oct., vol. 66, no. 10, pp. 411-419.

The new children's operating department for the Bremen Central Hospital (architect: Bert Gielen) was completed in April 1974. It is built on to the west wing of the department of child surgery and has three floors. The subground floor houses technical installations and stores. The ground floor is occupied by the out-patient department for child surgery, the central sterile supply department, staff rooms, library, and conference room. The first floor houses the operating suite: this has four theatres (one with two tables, suitable for transplants), the anaesthesia department and the recovery rooms. The intensive care unit, in the old department, immediately adjoins the suite. A second floor could be added if required later. The paper is illustrated with a site plan, plans of each floor, a sketch plan of the operating suite, and six photographs.

17. WAKELEY, J. **Nuffield Orthopaedic Centre theatre complex.** *Nursing Times*, London, 1974, Oct. 24, vol. 70, no. 43, pp. 1648-1650.

The Joseph Trueta complex at the Nuffield Orthopaedic Centre, Oxford, consists

of three operating theatres and a 22-bedded acute care ward. One of the theatres is of conventional design and the other two are clean-air enclosures. These special structures comprise armour-plate glass on three sides and a fourth wall consisting of two sterile curtains which just overlap. Each area measures 10 feet by eight feet. All but the immediate operating team are excluded from the enclosure. The number of particles originating from the operating team is reduced by dressing them in closely-woven water impermeable gowns and by continuously extracting exhaled air from within the gown by using helmets. The entire complex, built in the Oxford method, is connected to the remainder of the hospital on the south side and is approached by a corridor from the admissions ward and bed preparation area. Entry to the operating suite is controlled by a receptionist who checks the details of each patient before he proceeds on a trolley to the transfer bay. A plan and four photographs of the complex are included.

## DESIGN OF SPECIAL HOSPITALS OR UNITS

18. BRITISH PAEDIATRIC ASSOCIATION. **Planning of hospital children's departments: report of the working party [Chairman: P. N. Swift].** London, British Paediatric Association, 1974, 72pp.

After considering the philosophy of the relationship of the child to the hospital, this report makes recommendations on functional programmes for: the children's out-patient unit and comprehensive assessment centre; the in-patient unit; the special care baby unit; and the isolation section. The final section deals with the children's department as a whole.

19. BECKMAN, M. Integrerade bostadsgrupper för vuxna utvecklingsstörda. **[Integrated living for mentally handicapped adults.]** (Byggforskningens Informationsblad B6:1974) Stockholm, Statens Institut för Byggnadsforskning, 1974, 35pp. 11.00 kr.

This information sheet presents a summary of the final report of a Swedish National Building Research Centre enquiry. The tendency is away from the isolated treatment of mentally handicapped persons towards the provision of integrated support, assistance and work for such people within the framework of normal society. The paper discusses ways in which various categories of mentally handicapped patients can be discharged from institutions in order to live at the appropriate level of independence in an ordinary environment. It is in four sections: background; model for integrated accommodation units; requirements—environment and service; and practical problems.

## RESIDENTIAL ACCOMMODATION

20. Ein neues Personalwohnheim für die Mitarbeiter der Diakonie-Anstalten Bad Kreuznach. **[A new home for the staff of the Diaconate Hospital, Bad Kreuznach.]** *Krankenhaus Umschau*, Kulmbach, 1974, Sept., vol. 43, no. 9, pp. 789-790.

The new staff residence for the Diaconate Hospital, Bad Kreuznach, has 11 main floors, a subground floor and a top floor. The ground floor has six rooms specially adapted for the disabled and the 10 floors above each have 14 single bed-sitting-rooms:

each has a main room (15.50 sq.m.), a sanitary area (3 sq.m.) with shower, W.C. and wash-basin, a small hall and kitchen (4.10 sq.m.) and a balcony (4.10 sq.m.). There are also eight two-room apartments occupying the space of two single rooms. The top floor has a common lounge and a terrace. The paper is illustrated with plans of a single room and a two-room apartment.

## GARDENS AND GROUNDS, PARKING

21. THODAY, P. R. and SARGENT, M. J. **Hospital grounds utilisation: an investigation into the social and medical contribution grounds make to the hospital community.** Bath, University of Bath, 1974, iv, 77pp.

This report attempts to identify the different ways in which hospital grounds are used by all sections of the community. In particular, efforts have been made to investigate the current and potential medical uses of open air facilities and to identify which categories of patients are most likely to benefit. The report has two main parts: (i) non-medical use (visual amenity, landscape zones and staff relaxation, residence and sport); and (ii) medical use (active and passive). Among the major findings are: (i) correctly designed hospital grounds can directly serve patients, staff and visitors yet many hospitals receive only general cosmetic landscape treatment; (ii) where possible hospital grounds should contain open air therapy areas, which should cater for both active and passive pursuits; (iii) the construction and maintenance of such areas need not cost more than similarly located cosmetic landscape features; (iv) they should be developed after consultation between landscape designers, medical and paramedical authorities, administrators and grounds maintenance officers; (v) staff facilities influence job satisfaction; and (vi) the general public is influenced by the appearance of hospital grounds.

22. **Efficiency intrinsic in two hospital parking facilities.** *Hospitals*, Chicago, 1974, Sept. 16, vol. 48, no. 18, pp. 28, 32, 34.

The $2.5 million parking facility at Methodist Evangelical Hospital, Louisville, Ky. (architects: Arrasmith, Judd, Rapp, and Associates, Louisville) accommodates 850 cars on five above-ground levels and accommodates the hospital's mechanical equipment and central stores area in the basement. The simple circulation system devised to direct traffic flow and parking patterns within the garage is described. The exterior was designed to conform as much as possible with existing buildings and new construction in the immediate area. At Santa Rosa Medical Centre, San Antonio, Tex., a garage and child care centre for 150 children of working mothers was designed and built in about seven months at a cost of $2 million. The four-level garage accommodates 1,130 cars and was designed to allow the addition of two more levels to accommodate another 600 cars.

23. HÖSCHELE, K. and SCHMIDT, H. Klimatische Wirkungen einer Dachbegrünung. **[Climatic effects of a roof garden.]** *Garten und Landschaft*, München, 1974, June, no. 6, pp. 334-337.

Investigations carried out on flat-roofed blocks at the Karlsruhe Municipal Hospital have indicated that there are distinct climatic advantages when such roofs are planted

out with shrubs, etc., instead of being covered with gravel or shingle. The results of the study are set out in a series of tables which show, among other things, the following: a lower coefficient of reflection of sun and light rays; lowering of the temperature of walls, window surfaces and room air on hot summer days; improvement in air purity; and a reduced level of noise. It is considered that the cost of planting out the roof surface is more than compensated for by the climatic advantages.

## OTHER ASPECTS: EVALUATION OF BUILDINGS

See Abstract No. 7

# ENGINEERING SERVICES

See also Abstract No. 53.

24. JONES, W. D. **Hospital engineering is technology management.** *Hospitals*, Chicago, 1974, Sept. 1, vol. 48, no. 17, pp. 99-100, 160.

This paper considers the forces behind the coming changes in the approach to technology and the responsibilities and qualifications of the hospital engineer of the future. As medical procedures and techniques have advanced, technology in health care has become more complex but the management of technology has not kept pace with technology itself. Improved safety standards require an active approach to good engineering and the costs of reacting to technology on an 'after-the-fact' basis are too high. Medical equipment must be replaced frequently and expensive service contracts may be required to keep the equipment operating. The responsibilities of the hospital engineer of the future include: providing information for decision-making on the budget, staff, supplies, etc.; providing in-service staff training on matters such as safety and fire precautions; operation, maintenance, repair and replacement of physical plant; and inspection, repair, testing, etc., of medical equipment. His responsibilities must be accompanied by adequate authority and control of resources and he should control the budget, staff, supplies and methods of his department. The hospital engineer must be technically competent as an engineer, a leader and a manager. Small hospitals which cannot afford a full-time engineer/manager may be able to obtain service from an outside agency by contract or by a shared service plan.

25. WHELPTON, D. **Hospital department of medical engineering: electromedical service—red herring or bread and butter?** *Biomedical Engineering*, London, 1974, Oct., vol. 9, no. 10, pp. 481-483.

This paper explains the policies formulated to build up a new medical physics department at the University Hospital of Wales, Cardiff. The policy towards physics service in general and electronics servicing in particular are discussed. Any such policy requires continual development both of the policy itself and of the techniques used to realize that policy; further, from time to time restrictions become evident and require investigation. Particular reference is made to routine electronics servicing, electrical safety checks, procedure development, renal dialysis technical support, and electronics and bioengineering development.

## INSTALLATIONS IN GENERAL

26. NENNINGER, B. Gebäudeautomationsanlagen des Rigshospitalet in Kopenhagen. **[Automated installations at Rigshospitalet, Copenhagen.]** *Krankenhaus Umschau*, Kulmbach, 1974, Sept., vol. 43, no. 9, pp. 790-792.

The 17-storey main block of the Rigshospital, Copenhagen, one of the largest and most modern in Europe, devotes five floors to technical installations. To monitor these installations the GEAZENT system is used. This has a central station, with main console, and 17 substations. These latter give warning of failures and disturbances, continuously record measurements, and accept orders from the central station. The system has a capacity for 226,000 warnings, 78,000 measurements and 62,000 orders. The following installations are monitored: ventilation, air filters, refrigeration, water heating, compressed air, water distillation, waste water, electricity, pneumatic tube, and lifts.

## ARTIFICIAL LIGHTING

27. **Health care.** *Lighting Design and Application*, New York, 1974, Sept., vol. 4, no. 9, pp. 4-65.

The 14 papers in this feature discuss lighting in patient areas and operating suites, and describe the lighting installations in four hospitals, a dental clinic and a staff dining-room, and a patient service console system.

## COMMUNICATION SYSTEMS

28. SWERTZ, P. Zentrale Rufanlagen im allgemeinen Krankenhaus: Bericht über die Ergebnisse einer Pilot-Studie. **[Central call systems in the general hospital: report on the results of a pilot study.]** *Krankenhaus Umschau*, Kulmbach, 1974, Sept., vol. 43, no. 9, pp. 770-773.

In order to assess the value of centrally operated call systems a detailed study was made of all calls made at two hospitals (Hospital A, 665 beds; Hospital B, 445 beds) for one week. The total number of calls was 3,865 (A) and 3,132 (B). Divided according to origin the number of calls was as follows (A followed by B): patients, 2,709, 2,722; nurses, 563, 63; doctors, 139, 7; operating suite, 182, 130; X-ray department, 14, 11; laboratory, 16, 1; other, 242, 198. The differing peak periods in the two hospitals were mainly due to differences in visiting hours. The fact that a central system interposes an anonymous voice between patient and nurse is not of so much importance where the patient is looked after by several different nurses. The system is not as effective in saving journeys as has been claimed since 49 per cent of calls at A and 60 per cent at B were either requests for a bedpan or for the nurse to come. On the whole patients and nurses favoured the system but if its full value is to be realized it should be used more as a means of communication between departments (and for paging) and not simply as a nurse-call system. A central system operating 24 hours a day needs a staff of 4.5.

## BOILERS AND BOILER HOUSES

29. GRAY, R. B. **A power plant for tomorrow.** *Hospital Forum*, Los Angeles, 1974, Aug., vol. 17, no. 5, pp. 11-12.

The new nine-storey, 168-bed ward block at Martin Luther Hospital, Anaheim, Calif., will have a central power plant which has been unusually designed for energy conservation, economy, ecology and safety. The plant is about 500 feet from the tower block to allow for expansion; service lines are in a rectangular-shaped pipe tunnel. The plant has an automatic system using a control console monitored by a single engineer; almost 200 locations are constantly monitored. Certain critical areas of the hospital receive their energy from the hospital's own generator. If the public electricity supply is interrupted, other areas can be brought into the hospital's system on a selective basis.

## VENTILATION AND AIR-CONDITIONING

See Abstract Nos. 53, 88, 96, 119, 120

## MAINTENANCE OF BUILDINGS AND EQUIPMENT

30. CLARK, S. **Hospital maintenance is different.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Sept., vol. 16, no. 9, pp. 55, 57.

Industrial maintenance systems are not entirely suitable for hospitals. Based on his experience at the Wellesley Hospital, Toronto, which has 600 beds and a 22-man maintenance department, the author points out some of the differences between industry and hospitals. In hospitals there are perhaps a hundred or more people who can call for maintenance and it is not possible to establish priorities beforehand. Between half and three quarters of all requests in hospital are urgent and need less than two hours' work. Even with a preventive maintenance programme small emergencies occur. Because hospitals pay lower wages than industry, mechanics are not always as highly skilled as they might be and predetermined time standards for jobs cannot be adhered to. Maintenance of complicated equipment in hospitals is often contracted out which is expensive and does not always provide a good service. The goals of a hospital are often in conflict with tight cost control and affect maintenance—no new system should be introduced which might conflict with the hospital's goals. Systems and techniques can be borrowed from industry but only if they are suitable for a hospital's needs.

## SANITARY EQUIPMENT AND FITTINGS

31. PAYNE, R. **Drainage design in 20th century hospitals.** *Hospital Development*, London, 1974, Sept./Oct., vol. 2, no. 5, pp. 42-44; Nov./Dec., vol. 2, no. 6, pp. 38-39.

The author describes the drainage systems incorporated in the designs for the Greenwich District Hospital and for the Harness horizontal systems concept of the

Department of Health and Social Security. The basic requirements to be met were: complete freedom for the architect to place sanitary equipment anywhere over the floor area; blockages to be prevented wherever possible; any blockage to be readily accessible for rapid and easy removal; and provision for special requirements (operating theatre, pathology, X-ray, etc.). During the development of the Harness planning project, drainage rules were formulated to take account of these requirements. The rules are reproduced and the two basic systems developed are described. One system is for departments sited on the ground floor and the other for departments above the ground floor. Photographs and diagrams are included.

# EQUIPMENT, FITTINGS, FURNITURE

## BEDS, COTS, ETC.

32. BRETTEN, P. **Hospital beds.** *Nursing Mirror*, London, 1974, Oct. 24, vol. 139, no. 17, pp. 48-50, 53-55.

After a historical note, this paper discusses: some general aspects of the hospital bed; ward beds in general; features of special types of beds; King's Fund specification [see *Hospital Abstracts*, Vol. 7, Abstract 1293]; electrically operated beds; the stand-up bed; the tilting and turning bed; head traction; the turning frame; the flotation bed; high air loss levitation; and low air loss patient support system.

## EQUIPMENT GENERALLY

See also Abstract No. 8

33. SANGSTER, J. A. **Equipping the 'best buy' hospitals.** *Health and Social Service Journal*, London, 1974, Oct. 26, vol. 84, no. 4410, pp. 2480-2481.

The equipping of the two 'best buy' hospitals developed by a project team in 1967 was organized by a special sub-group including representatives of the Department of Health and Social Security (DHSS) and the hospital authorities. Each hospital has about 540 beds; loose equipment costing £0.75 million involved 2,100 categories of equipment for 1,500 rooms in 34 departments. Selection policy was to make maximum use of central supply and regional or hospital contracts but in some cases other sources had to be used. The items selected, with the enthusiastic co-operation of manufacturers, were the result of applying 'best buy' principles within the framework of the operational policies: it must not be assumed that universal approval has been conferred on any item. A DHSS interior designer was responsible for choice of colours to ensure a balanced scheme.

# STAFF GENERALLY

## RECRUITMENT

See Abstract No. 43

## STAFF MANAGEMENT

See also Abstract Nos. 44, 45

34. HUGHES, R. D. **Staff attitudes and opinions: report to King Edward's Hospital Fund on a survey of staff attitudes and opinions in the London Hospital Group.** (King's Fund Project Paper No. 5) London, King's Fund Centre, 1974, [54]pp. £0.50

A survey of staff attitudes and opinions was carried out in the London Hospital Group in 1972 by the Ashridge Management Research Unit. The survey covered all staff in the group, and (in principle) all aspects of the work situation. This report selects a small number of results from the survey which it is believed are related to issues of widespread interest in the hospital service and draws attention to some wider implications of the overall view emerging from the survey. It also outlines some suggestions for future application of staff opinion surveys in the hospital field.

35. PAYNE, B. R. **An experiment in staff participation.** *Hospital and Health Services Review*, London, 1974, Oct., vol. 70, no. 10, pp. 356-357.

An experiment in staff participation started at Hope Hospital, Salford, in April 1974. The project, based on working parties consisting mainly of ancillary staff, was set up by PMS Limited, management consultants, for the Department of Health and Social Security. The objects of staff participation are: (i) to improve relationships between management and staff and various staff groups; (ii) to improve communications and provide an opportunity for staff to learn of developments; (iii) to give people experience of actual problems and the chance to try to resolve them; (iv) to create an atmosphere of mutual trust; and (v) to develop a framework in which all categories and levels of staff can contribute. Initially six working parties were established to deal with the works department, laundry, portering, catering, extension of household teams and introduction of a messenger service. These were extended to eight later by working parties on the central sterile supply department and domestic work. Each group consists of about six members of all grades and national trainees act as discussion leaders. They meet weekly and problems are discussed. When an acceptable solution is reached it is put to the head of the department. By July a number of quantifiable results had been achieved as well as some unquantifiable ones, through a better appreciation of the problems of other departments. The project is still in an experimental stage but two problems needing attention are the question of communication and the difficulty of creating mature working groups. In the early stages great reliance was placed on the national trainees but some working parties are beginning to be able to function independently. When the management consultants withdraw a liaison officer will probably be needed to maintain and service the organization of participation.

36. KEY, P. L. **The introduction of a briefing group system in a psychiatric hospital.** *Hospital and Health Services Review*, London, 1974, Oct., vol. 70, no. 10, pp. 350-352.

This paper describes the steps taken at Hollymoor Hospital, Birmingham, to introduce a new system of communications, namely briefing groups. Methods of communication had previously consisted of a magazine and newsletter, memoranda,

meetings of varying frequency and the 'grapevine'. Briefing groups have advantages over these in that they bring people together in small groups under their immediate boss so that what they need to know can be explained to them face to face. The briefing group system at Hollymoor is in the main an extension of existing management structures. The aim of introducing them was incorporated in the management by objectives programme. Preparations before the introduction of the system are briefly described. Because the role of briefing officer was an entirely new one for the staff concerned the Industrial Society organized one-day training sessions in the hospital. Topics covered were: (i) how communication affects efficiency; (ii) the need for briefing groups and how they work; (iii) effective speaking; and (iv) running a meeting. Full briefing sessions have been held monthly since March and staff reaction has been very favourable. A wide range of material has been fed through the system including: review of the portering system; smoking in public areas; deployment of library staff; patients' complaints; launderette for patients; and fire procedures.

## STAFF TRAINING

See also Abstract Nos. 46-49, 52, 53

37. STRINGHAM, R. and SMITH, R. B. **Orientation—the first step in employee retention.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Oct., vol. 16, no. 10, pp. 32, 34.

The organization and development of effective induction and orientation courses for hospital staff depends on the identification of objectives. These include: the specification of what the employee must be able to do, or what he should know after instruction; the conditions under which the employee is to do his job; and the level of attainment, or understanding of the objective, by the employee. The paper sets out in tabular form an integrated training programme under four heads; general orientation (first phase); initial department assignment; general orientation (second phase); and hospital education programmes.

38. WHITE, D. **Business management for administrators: training in relation to needs.** *Health and Social Service Journal*, London, 1974, Oct. 12, vol. 84, no. 4408, p. 2354; Oct. 19, vol. 84, no. 4409, p. 2414; Oct. 26, vol. 84, no. 4410, p. 2478; Nov. 2, vol. 84, no. 4411, pp. 2535-2536.

The Department of Health and Social Security has financed the participation of a small number of National Health Service staff in business management courses since the autumn of 1971. This assessment of the value of the experiment is based on interviews with the 19 individuals who attended 10- to 12-week courses up to the end of 1972 at the Manchester Business School, London Business School and Administrative Staff College, Henley, at fees of about £1,500 a course. Their colleagues and seniors were also interviewed. The interviews were held before, during and several months after each course. In most cases the training had resulted in a considerable improvement in management skill and it is concluded that the training was of considerable value to the majority of participants and, through them, to the National Health Service.

39. HITCHINGS, C. R. and SMYTH, M. **The Royal Free Hospital. 3. Modular training.** *Nursing Times*, London, 1974, Oct. 17, vol. 70, no. 42, pp. 1621-1622.

A system of modular training has been in operation at the Royal Free Hospital for about a year. The scheme is multidisciplinary and staff of many grades and from many departments are involved. It has two main objectives: to develop the management techniques of staff who have a supervisory function; and to improve interdepartmental relationships through a greater understanding of mutual problems. The topics covered, each representing a module, are: communications; problem solving; getting the best from others; counselling; interviewing; management by objectives; meetings; effective speaking; job analysis and job description; and the application of work study. Each session lasts for about 3½ hours; a table indicates its division into sections. Evaluation of the course by course members and heads of departments showed that it was generally well received and its continuation has been recommended.

### STAFF WELFARE

See Abstract No. 126

## SPECIAL CLASSES OF STAFF

### MEDICAL STAFF

40. MASON, A. M. S. and DIXON, F. M. **The organization of a medical firm.** *Health Trends*, London, 1974, Aug., vol. 6, no. 3, pp. 49-51.

This paper is concerned with the working relationships between consultants and junior medical staff (registrars and house officers) within a medical 'firm' or department. The organization of surgical teams is excluded from this discussion. The main activities for which the consultant is responsible are: diagnosis and treatment of patients; training of staff 'on the firm'; teaching other hospital staff; and recommending hospital policies and development. While the registrar has a supervisory relationship with the house officer the managerial relationship is direct between consultant and registrar and consultant and house officer. The division of work within the 'firm' will vary according to conditions and the capabilities of medical staff but tasks should be definitely allocated, and the degree of discretion allowed to each member clearly defined, by the consultant. More consideration should be given to the organization of a 'firm' so that staff dissatisfaction can be reduced.

### NURSING STAFF

See also Abstract Nos. 62, 113, 117, 122, 141

41. COLAVECCHIO, R., TESCHER, B. and SCALZI, C. **A clinical ladder for nursing practice.** *Journal of Nursing Administration*, Wakefield, Mass., 1974, Sept./Oct., vol. 4, no. 5, pp. 54-58.

The clinical ladder concept of appointment and promotion for registered nurses employed in the University of California health care facilities was developed by nurse

representatives who met for the purpose of negotiating with the university personnel office. A behaviourally stated clinical series of four levels was developed. Each level describes minimum behaviours, and the positions were classified as clinical nurse I to IV. Details of each are reproduced. The proposals have been endorsed for implementation. Illustrations are given of their use in nursing practice.

42. ELMS, R. R., TIERNEY, B. and BOYLAN, P. A. **Irish nursing at the crossroads.** *International Journal of Nursing Studies*, Oxford, 1974, Sept., vol. 11, no. 3, pp. 163-170; summaries in French, Spanish and Russian, pp. 170-172.

An Bord Altranais (the Nursing Board) is the official statutory body of nursing in Ireland. It has very wide powers and is responsible for: (i) conducting examinations and registering nurses; (ii) renewing and accrediting all nursing programmes and inspecting training hospitals; (iii) developing and revising the curricula of all nursing courses; and (iv) organizing postgraduate courses, including interdisciplinary programmes. The four basic types of training are: general, psychiatric, nursing of sick children and nursing the mentally handicapped. All basic courses last three years and all nursing schools are administered by hospitals. Nurses with general training may go on to study special aspects and they may qualify as psychiatric nurses after completing an 18-month programme. There is no college of nursing at present and students are used to provide nursing service in the hospitals, about 60 per cent of the positions in most hospitals being filled by students. There are far more applicants for training than there are places and many would-be nurses have to go to England to study. In Ireland registered psychiatric nurses are represented by a trade union rather than by a professional organization and working conditions, salaries, etc., are all subject to union arbitration. Community mental health services are replacing the old custodial system of care and this is affecting psychiatric training which occurs mainly in the psychiatric hospitals. So far the basic training offers little experience other than in-patient care and little theoretical content has been added to the syllabus to prepare the psychiatric nurse to operate outside the hospital.

43. BUCHANAN, D. I. **The bank is open.** *Nursing Times*, London, 1974, Oct. 17 vol. 70, no. 42, pp. 1634-1635.

This paper describes the establishment of a nurse bank at St. Helier Hospital, Carshalton, Surrey. At the initial interview, which lasts about an hour, prospective bank nurses are encouraged to do most of the talking and the conditions of service are explained. Bank nurses do a minimum of 10 hours and a maximum of 40 hours per week. Each bank nurse telephones in every Thursday morning to confirm the hours she is prepared to work during the coming week: at the same time she is told where she has been allocated. Bank nurses start in groups of eight or 10 on a chosen day which they spend in the nursing school; an orientation programme in the first three or four areas chosen by the nurse follows. In the first three months, 90 enquiries were received; 40 nurses were appointed and 17 are in the process of being interviewed and engaged.

44. FISHER, D. W. and THOMAS, E. **A 'premium day' approach to weekend nurse staffing.** *Journal of Nursing Administration*, Wakefield, Mass., 1974, Sept./Oct., vol. 4, no. 5, pp. 59-60.

One particular nurse staffing problem is to provide adequate week-end nursing

coverage with minimum cost to the patient. Rochester (Minn.) Methodist Hospital is in the process of implementing a new approach to the problem. It gives the nurse an extra day off, a premium day, if she volunteers to work one additional week-end within a four-week scheduling block. The premium day has an added advantage of not adding directly to hospital cost. As an incentive nurses are given the opportunity to specify the manner in which the extra day is included in their individual schedules for the following two weeks. Examples of typical and premium day four-week schedules are reproduced. Initial results of the pilot project suggest that sufficient nurses will accept the system to make the premium day a viable option for week-end coverage.

45. WENGERD, J. S., WYKLE, M. L. and TOBIN, H. M. **Leadership development at the clinical unit level.** *Journal of Nursing Administration*, Wakefield, Mass., 1974, Sept./Oct., vol. 4, no. 5, pp. 19-25.

Leadership programmes most frequently concentrate on leadership development of supervisory staff. Equally pertinent, but often given little attention, is a programme of leadership development for registered nurses assigned to patient care units. Workshops and individual guidance are two methods which can be used. The content for leadership development is based on the role expectations and therefore differs for the several different groups of registered nurses from different basic educational programmes. Content and reference building, teaching methods and use of resource persons are discussed.

46. QUINN, F. M. **Audio-visual aids in nurse education.** *Hospital & Health Services Purchasing*, London, 1974, Oct., pp. 398-399.

The Nightingale School Learning Resources Centre, housed in the school's library, is described in this paper. Audiovisual aids are now produced to a high standard but at a relatively low cost. They can be used to great advantage in nursing education, which is becoming increasingly complex and consequently demanding of both student nurses and tutors. At the Nightingale School, audiovisual material can be issued by the librarian in a similar way to books and students are able to consult both text-books and audiovisual materials in the library. Students of radiography and physiotherapy and operating theatre assistants may also use the equipment. This includes six tape/slide consoles, a video-cassette player for playing back television programmes, and three programmed learning machines. A library of X-rays is also planned. Some commercially produced programmes are used, but the school also produces its own where appropriate. A full-time technician is responsible for the day-to-day running of the centre. The most important advantages of such a centre are that it enables the student to learn at his or her own pace and at convenient times, and relieves the tutors of lecturing time so that they can give more attention to slower students.

47. WHYTE, D. **Nursing skills.** *Nursing Times*, London, 1974, Oct. 31, vol. 70, no. 44, occasional papers pp. 93-96; Nov. 7, vol. 70, no. 45, occasional papers pp. 97-99; Nov. 14, vol. 70, no. 46, occasional papers pp. 101-104; Nov. 21, vol. 70, no. 47, occasional papers pp. 105-108.

This study is an attempt to focus attention on the learning, and the communication, of nursing skills. It seeks to glean information from the vast amount of research which has been undertaken in the study of skill in many areas of human activity, and to

relate these findings to nursing skills. The paper covers: identification of the problem; the nature of skill; acquisition of skills; systematic development of instruction; skill analysis; choice of teaching medium; and an experiment in the use of a tape slide to communicate part of a basic nursing skill.

48. HOLMES, A. G. **The establishment of a regional school of nursing at Newcastle Technical College.** *National Hospital*, Chippendale, N.S.W., 1974, Aug., vol. 18, no. 8, pp. 29-32.

In May 1972 a pilot scheme in nursing education at a technical college was inaugurated when the Newcastle (New South Wales) Regional School of Nursing was established at the Newcastle Technical College. The course is based on the three-year Nurses' Registration Board syllabus and allows for block releases giving 840 hours of theory and 240 hours of supervised clinical experience. Preliminary training lasts six weeks, with two weeks' clinical experience: block releases are normally of three weeks followed by one week of controlled clinical experience. Students at the school do not wear uniform and there are few rules and regulations. A total of 11 hospitals participate in the scheme. Details are given of the staffing of the school and of the modern equipment provided. At present 900 student nurses are involved in the scheme.

49. FISH, E. J. **Theatre nurse training course.** *Nursing Times*, London, 1974, Oct. 24, vol. 70, no. 43, pp. 1658-1660.

The Joint Board of Clinical Nursing Studies has approved an outline curriculum in operating department nursing. One of the 15 courses approved by the board is at the University Hospital of Wales. The course lasts 47 weeks (exclusive of holidays) and covers a planned period of one year. During this time the nurse attends a minimum of 50 days planned instruction and also gains supervised experience in the areas specified in the curriculum. Details are given of the aims of the course, its arrangement, and the system of continual assessment which is used.

50. HAIMAN-ELKIND, H. **Changing the structure of nursing services.** *Nursing Times*, London, 1974, Oct. 31, vol. 70, no. 44, pp. 1712-1713.

The structure of the nursing service at Hadassah-Hebrew University Medical Center, Jerusalem, has been changed so that four assistant directors cover all units and wards except the operating, out-patient and dental departments. These last three departments report direct to the director of nursing services. The responsibilities of the individual assistant directors are: (i) manpower; (ii) co-ordinator of nursing and other hospital services; (iii) organizer of in-service education and orientation; and (iv) revision of working methods in nursing. Some positive results are already emerging. A second change has been the placement of head nurses on rotation in the nursing service administration offices; this has resulted in improved relationships between head nurses and management.

51. NATIONAAL ZIEKENHUISINSTITUUT. De werkzaamheden van de wacht. **[Work of night nursing staff.]** (Informatieblad OR3) Utrecht, Nationaal Ziekenhuisinstituut, 1974, 23pp.

A working party set up by the [Netherlands] National Hospital Institute has been looking at the work of night nursing with a view to formulating guidelines for general

use. Conditions in seven hospitals with between 234 and 671 beds were examined and compared. The number of beds per staff member varied between 10.2 and 21.3, and per staff nurse between 15 and 83: In 59 per cent of wards a staff nurse functioned as 'head'. A series of tables sets out the distribution of various grades of nursing staff by specialty, etc. For most of the night, duties are mainly concerned with keeping an eye on patients but at the beginning and end of the shift (particularly the latter) there are nursing duties to be carried out. Before qualitative and quantitative night staffing standards can be laid down further discussion on the following points, among others, is needed: minimum number per ward (is single manning acceptable); availability of the night head nurse; meal breaks away from the ward; the manning of a central call system; and patients' wakening time (sharing early morning duties with day staff).

52. KING EDWARD'S HOSPITAL FUND FOR LONDON. **The language barrier and the overseas nurse trainee: report of a working party set up to discuss the problems of orientation for overseas nurse trainees.** (King's Fund Project Paper No. 8) London, King's Fund Centre, 1974, 47pp. £0.50

This report is in two parts. The first considers methods of improving information, recruitment and selection and recommends the adoption of some form of standardization and centralization for dealing with overseas applications for nurse training. The second part considers orientation and concludes that it would be inappropriate, under present circumstances, to produce any form of model orientation course or courses, since flexibility is the first essential for the success of such courses. It would be more helpful for the nursing profession to provide more general guidance in the form of a statement on the principles and philosophy of orientation accompanied by checklists for adaptation to individual circumstances. Examples of such checklists are included.

## OTHER PROFESSIONAL AND TECHNICAL STAFF

See also Abstract Nos. 24, 131

53. LOEWER, H. Klimatisierung im Krankenhaus als wichtige Aufgabe der Krankenhausbetriebstechnik. **[Air-conditioning in the hospital as an important technological problem.]** *Krankenhaus Umschau*, Kulmbach, 1974, Sept., vol. 43, no. 9, pp. 793-796.

The supreme importance of proper air-conditioning in hospitals, particularly in such sensitive areas as the operating suite, is stressed and the basic principles of air-conditioning installations are outlined. An important contribution to the training of hospital engineers, in whose hands the responsibility for proper air-conditioning lies, was the setting up in 1970, at the Giessen College of Technology, of a separate department of health technology. This provides three courses: biomedical technology; technical hygiene (protection of the environment), and hospital engineering technology.

## ANCILLARY STAFF

See Abstract No. 35

# ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 36, 38-40, 50

54. WILES, B. M. **Participative management in the NHS.** *Health and Social Service Journal*, London, 1974, Oct. 26, vol. 84, no. 4410, pp. 2470-2471.

Participative management aims at involving all staff concerned in any work situation. There are four main areas of participative management which are particularly relevant to National Health Service (NHS) problems: setting targets of achievement; communication; overcoming personal conflict; and team building. Effective communications and participative management complement and supplement each other. Participative management in the NHS has so far been directly related to incentive bonus schemes and should reduce the problems of payment by results.

## GOVERNING BODIES, COMMITTEES

See also Abstract No. 6

55. PICKERING, E. A **radical approach to hospital board structure.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Oct., vol. 16, no. 10, pp. 24, 26, 28, 30.

Present trends in management both in industry and in other fields are for more participation by elected representatives of all interests concerned. The author considers that hospital management, too, should fall in line. He suggests that existing boards of management should be replaced by new ones, having operational authority and composed of elected representatives of the professions, other staff, and the community. The professional staff representatives should not be limited to doctors and representatives of other staff should also cover those not members of unions. Hospital administrators should look beyond the limited goal of patient care to one of total social responsibility.

56. LAWSON, J. S. and CRIBB, D. C. **Do hospital boards have a role?—Yes.** *National Hospital*, Chippendale, N.S.W., 1974, Aug., vol. 18, no. 8, pp. 15-18.

As governments assume greater responsibility for the financing and management of hospitals it might be feared that boards of management are becoming increasingly less important. To look into this whole problem a series of sessions has been held in Tasmania at which members of boards of management, senior hospital officers and Department of Health officials have discussed all aspects of it. The conclusion was that boards still have an important role to play just as they have in any industrial or commercial organization. Hospital boards must have specific goals and should develop techniques for measuring the hospital's performance. The paper includes examples of objectives, measurements and target performance levels used in some Tasmanian hospitals.

## ECONOMICS OF HOSPITAL MANAGEMENT

See Abstract Nos. 118, 135

## DATA PROCESSING

See also Abstract Nos. 67, 68, 123

57. BAKER, J. D. and BAKEWELL, G. **Mickey or mini?** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Oct., vol. 16, no. 10, pp. 44, 46, 48, 50-51.

Mini computers for use in Canadian hospitals are subject to the following conditions laid down by the Government: the complete system must not cost more than $60,000; type and size is limited in relation to the size of the hospital; no programmers are allowed on the hospital staff; and all programs belong to the Ministry for possible use by other Canadian hospitals. The selection of suitable systems is discussed with these conditions in mind and a check list shows the factors to be considered in evaluating them. It is advisable to discuss different installations with hospitals which have had experience of them.

## LIBRARIES

58. GOLD, R. A. and others. **The health information specialist: a new resource for hospital library services and education programs.** *Bulletin of the Medical Library Association*, Chicago, 1974, July, vol. 62, no. 3, pp. 266-272.

Improvement of patient care should be the aim of hospital information services as well as of educational programmes. Hospital librarians, with some extra training and support, should be able to play an important role in the following tasks: improving the effectiveness of library services and resources; helping hospital educators to develop, implement and evaluate educational programmes; and helping to co-ordinate information services with educational programmes. The hospital librarian should become a 'health information specialist'. The paper describes a one-week training programme for librarians.

59. FINK, W. R., BLOOMQUIST, H. and ALLEN, R. G. **The place of the hospital library consortium in the National Biomedical Communications Network.** *Bulletin of the Medical Library Association*, Chicago, 1974, July, vol. 62, no. 3, pp. 258-265.

In the United States a policy statement from the National Library of Medicine (NLM) suggests that hospital libraries should as far as possible meet their own information needs without calling on the NLM more than is necessary. This paper discusses a possible solution which would involve four levels of a hierarchy: (i) the basic unit, the individual hospital library; (ii) resource libraries, a number of hospitals forming a consortium; (iii) regional medical libraries; and (v) the NLM. Only when the resources of the three earlier stages had been successively exhausted would the NLM's resources be tapped.

60. COOPER, B. **Library services at Rampton Hospital.** *Health and Welfare Libraries Quarterly*, London, 1974, Sept., vol. 1, no. 3, pp. 46-59.

Rampton Hospital is one of three special hospitals controlled by the Department

of Health and Social Security and providing treatment under security conditions for mentally disturbed patients with dangerous, violent and criminal propensities. This paper describes the development and present status and work of the library services for patients and staff. The service is a joint one between the hospital and Nottinghamshire County Library. The librarian is paid by the County Council which reclaims the total cost of his employment from the hospital. The County Library makes an actual allocation of money for the librarian to spend on the general library stock. The hospital provides specifically educational material, that is the whole of the staff professional library stock, and the bulk of the remedial collections.

## ORGANIZATION AND METHODS, WORK STUDY

See also Abstract Nos. 51, 131

61. STAIN, W. C. and SUHM, R. T. **The growth of management engineering in hospitals.** *Industrial Engineering*, Norcross, Ga., 1974, Oct., vol. 6, no. 10, pp. 44-48.

This survey of hospitals in Metropolitan New York shows that the number of departments of management engineering has doubled since 1967. The average number of staff is four, nearly double that of two years ago. During the last two years smaller hospitals (200 to 300 beds) have begun employing management engineers. Some of the studies carried out are listed and reasons for the increase in management engineering are suggested.

62. ARCHER, S. E. **PERT: a tool for nurse administrators.** *Journal of Nursing Administration*, Wakefield, Mass., 1974, Sept./Oct., vol. 4, no. 5, pp. 26-32.

This paper describes PERT (Programme Evaluation Review Technique) and explains the development of the PERT network. Examples of PERT networks specific to nursing administration are given. PERT as a planning and control mechanism as well as a means for facilitating staff participation is discussed.

## MEDICAL RECORDS

See Abstract Nos. 127, 128

## HOSPITAL STATISTICS

63. EVANS, A. E. **Hospital Activity Analysis in Northern Ireland.** *Hospital and Health Services Review*, London, 1974, Oct., vol. 70, no. 10, pp. 352-355.

Hospital Activity Analysis (HAA) was first introduced in Northern Ireland in 1968. Some findings based on 1972 data from eight of the 71 general hospitals in the province are presented. Information for HAA is obtained from the admission form and clinical

data collected at the time of discharge. The findings are discussed and in some cases compared with similar (1971) data for England and Wales. Six tables of statistics are given. The author hopes that HAA will soon be extended to cover all in-patients in Northern Ireland but he suggests certain modifications of the system as follows: (i) an increase in the capacity of recording diagnoses and operations; (ii) the facility for clinicians and administrators to record details they deem relevant in special circumstances even though they may be outside the main scheme; and (iii) the inclusion of transfers of patients between specialties rather than the entry of the final diagnosis only. It is suggested that any reorganized scheme should be tried in a major hospital at present outside the scheme (e.g. the Craigavon Area Hospital) so that the system could be tested and refined before its extension to cover all in-patients in Northern Ireland.

### PUBLIC RELATIONS

64. BLOCH, J. L. and HANKIN, B. **Hospital responds to community protest.** *Hospitals*, Chicago, 1974, Sept. 1, vol. 48, no. 17, pp. 53-56.

The administration of Peninsula Hospital Centre, Far Rockaway, N.Y., endeavoured to improve relations between the hospital and its community especially the poor, black or Puerto Rican members, by altering the layout of the emergency department and improving its facilities, placing it under the supervision of the ambulatory care department and establishing a department of community relations. Human relations workshops were run to help build better relationships between staff and patients, to improve understanding and to find ways of alleviating the patient's anxiety. Radical changes have taken place in patients' attitudes to hospital care; they have higher expectations, more knowledge of what medical care can accomplish and they know their rights as consumers. These factors add to the pressures experienced by emergency department staff. Patients' complaints are dealt with by the community relations department and this provides an opportunity for the hospital to explain its policies and procedures to patients. All-day seminars attended by members of the hospital staff and representatives of the community enabled participants to see each other's points of view. Since the establishment of the community relations department its staff have become involved in many facets of community affairs including anti-poverty activities and drives to educate people on the dangers of lead poisoning and sickle cell anaemia.

## FINANCE AND ACCOUNTING

65. SILVERS, J. B. and PRAHALAD, C. K. **Financial management of health institutions.** Flushing, N.Y., Spectrum, 1974, ix, 339pp. £9.50

Financial management is much more than just accounting or book-keeping. In fact these particular areas receive little attention in this volume, which encompasses a variety of areas which are relevant to the task of financial management of health facilities. The aspects covered are: the task; basic accounting concepts; financial forecasting and analysis; management control systems; capital budgeting systems;

financing the institution; financing the system; and a framework for financial management. Fourteen case studies are included.

## FINANCE

66. COLES, J., DAVISON, A. and WICKINGS, I. **Control of resources.** *Health and Social Service Journal*, London, 1974, Nov. 16, vol. 84, no. 4413, pp. 2654-2655.

This paper reports a management research project at Westminster Hospital in which all the staff working on a ward (known as a clinically accountable team) have a budget and receive monthly information on their activities. The multidisciplinary group includes doctors, nurses, a social worker, a ward pharmacist, a medical secretary and an administrator; it has the assumed benefits of working together as a team, an assumption which is being tested. They meet monthly, with the research group, to discuss the information. Details are given of the establishment and organization of the project. The study has been running for six of its twelve months. Initial analysis has shown that doctors, nurses, and other staff can, and are willing to, accept budgetary responsibilities and to scrutinize their use of resources.

## HOSPITAL ACCOUNTING

67. MAXEINER. Projektorganisation und Projektablauf im Rahmen des DV-Vorhabens: einheitliche maschinelle Buchhaltung und Betriebsabrechnung in Krankenhäusern. **[Project organization and completion in the framework of data processing: integrated mechanical bookkeeping and accounting in hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1974, Sept., vol. 43, no. 9, pp. 755-760.

A working party on 'automation in the hospital', set up and financed jointly by the Federal Government and *Länder* of Western Germany in 1971, gave priority to a project on machine book-keeping and accounting. Ten hospitals, with financial support from central and local government, are taking part in pilot schemes. The project started in 1973 and is expected to be completed in mid-1975: this is a progress report. The aim is to produce a standard computerized system which could be adopted as a standard which could come into use by 1978.

68. GEBHARDT, M. Eine überregionale EDV-Lösung für Krankenhäuser: automatisierte Kostenstellenverteilung (Umlagerechnung). **[A supra-regional EDP solution for hospitals: automated cost-allocation.]** *Krankenhaus Umschau*, Kulmbach, 1974, Sept., vol. 43, no. 9, pp. 760-762, 767-768.

The costing system described here was developed at Volmarstein Orthopaedic Hospital in collaboration with IBM in agreement with the Ecclesiastical Centre for Electronic Data Processing. The system operates centrally for a number of linked hospitals. It will provide printouts giving detailed costing figures, breaking down subsidiary and minor costs under one head to those under another. The system can produce short-term assessments as well as monthly and annual costing returns. Specimen printouts are reproduced in the paper.

# SUPPLIES AND STORES

## SUPPLIES

69. HOUSLEY, C. E. **Provocative approaches to materiel management.** *Dimensions in Health Service*, Toronto, 1974, Oct., vol. 51, no. 10, pp. 32-38.

Material management has been defined as the management and control of goods and services from acquisition to disposition. Experience with this concept at St. Anthony Hospital, Columbus, Ohio, is described. Developments include replacing the purchase order with its numerous copies by a telecopier—by means of which only one piece of paper is generated by the hospital and one piece by the supplier; a reduction of inventories and a united supply, process and distribution system which replaces central supply. The aim of every material manager should be to relieve nurses of all non-nursing supply functions. Standardization of products is essential if material management is to be effective and a standardization committee can be very helpful if it is properly constructed. The prime supplier technique is recommended whereby 95 to 98 per cent of the total volume of a particular category of supplies is bought from one vendor for a specified period of time. Advantages of this method include discounts, better service from the supplier, and lower hospital inventory because it is not necessary to buy large quantities to get a better price. Group purchasing has generally been a failure because it connotes standardization and because of a lack of commonality among the hospitals. Reference is made to experience at St. Anthony Hospital in relation to stockless purchasing (i.e. purchasing for direct use by departments), computerized purchasing, and a total supply mobile trolley exchange system.

## PURCHASING

70. EDWARDS, J. **The cost of contracting.** *Hospital and Health Services Review*, London, 1974, Oct., vol. 70, no. 10, pp. 358-359.

This paper describes a research project to test the validity of the belief that large-scale contracting saves the hospital service money. The aim was to estimate just how much the organization of a contract cost in cash terms and to relate this to the savings generated by the contract. The study was of a regional contract for the supply of dressings. All the area supplies departments took part, the contract being raised by one of them on behalf of all. The contract procedures, which occupied about five months, are outlined and a table in the text shows the cost breakdown. The cost of raising the contract has little meaning unless it is related to the price savings produced by the contract negotiations. Assessing such savings is difficult. Conclusions drawn from the study were: (i) it costs the health service a lot of money—mainly in salaries—to raise large-scale contracts; (ii) it is difficult to see how the cost could be reduced; and (iii) if contracting departments are to be established at regional level they should be carefully costed and consideration should be given to the question of whether sufficient staff with the necessary expertise are available and the effect on the work of area supplies officers.

# CATERING, DIETETICS, KITCHENS

## HOSPITAL CATERING

71. ZORN, H. and HAMANN, E. Das Speisenversorgungssystem der Universitätskliniken Köln und erste Erfahrungen mit Tiefkühlmenüs. **[The food service system of Cologne University Hospital and first experiences with deep freeze menus.]** *Krankenhaus Umschau*, Kulmbach, 1974, Sept., vol. 43, no. 9, pp. 773-776.

The 2,000-bed Cologne University Hospital prepares its own deep-frozen food which is cooked and processed by staff working normal hours for a five-day week. Main meals are trayed centrally and transported in special trolleys to the 80 ward kitchens (each serving up to 40 patients) which are equipped with refrigerators, hot air convector ovens, microwave ovens and coffee machines. Patients on normal diets are offered five choices for main meals and those on special diets three choices. Meals are normally heated in the hot air convectors and this takes 45 minutes: for patients who miss normal mealtimes the dishes can be reconditioned by microwave (two to three minutes if thawed, five to six minutes if deep-frozen).

72. FURBANK, M. **Improved meals for geriatric patients.** *Nursing Times*, London, 1974, Sept. 26, vol. 70, no. 39, pp. 1501-1503.

This paper describes the introduction of improved menus with a choice of meals in a long-stay hospital at Liskeard, Cornwall. The menus allow a choice at breakfast and supper only as the majority of patients were eating well at midday and wastage was minimal. The menus are set out in three-week cycles. Daily requisition forms provide a separate column for special diets and total daily requirements for each ward. A member of the catering staff collects the forms which reach the kitchen the previous day. Some of the problems and how they were solved are discussed. Seventy per cent of patients are now capable of making a choice. Improvement has been noticed in the general and mental health of patients. Food wastage is minimal; costs have not increased and are below the regional average for hospitals of this type.

73. GORDON A. FRIESEN INTERNATIONAL. **The ready foods system for health care facilities.** Boston, Mass., Cahners Books, 1973, [xi], 123pp. $9.95

This book represents a state-of-the-art discussion of planning for and implementing a ready foods system. It is in three parts: general description of the system; operational details; and economics of the system. A glossary of terms is included.

## DIETETICS IN THE HOSPITAL

74. SCHILLER, M. R. and VIVIAN, V. M. **Role of the clinical dietitian.** *Journal of the American Dietetic Association*, Chicago, 1974, Sept., vol. 65, no. 3, pp. 284-290.

A 34-item questionnaire on the activities, responsibilities and qualities which compose the role of the clinical dietitian was answered by 728 physicians and 701 dietitians.

Both groups agreed that the dietitian should ideally be a full and equal member of and make a positive contribution to the health team. Physicians agreed that dietitians should provide information for the physician, but not that they should assist in decision-making activities. The dietitians considered that their role included these activities, but many indicated that they should also perform conventional tasks. Both groups perceived incongruity between ideal role and actual performance for all functions of the dietitian. Dietitians were inclined to appraise themselves more favourably than were physicians. The two activities most likely to cause disharmony between physicians and dietitians were attendance at medical rounds and initiation of dietary prescriptions. Dietitians saw lack of time as the primary reason for deficiencies in role performance. Lack of education, restrictions of hospital policy and shortage of trained staff were more important deterrents to ideal performance than limitations imposed by physicians.

75. DAWES, K. S. **Dietitians in the community: report of an exploratory study.** Canterbury, Health Services Research Unit, University of Kent, 1974, 108pp.

The current provision of and demand for dietary services in the community was studied by means of postal questionnaires to local health authorities and hospitals and by interviews with selected dietitians. Considerable differences were found between regions in respect of the employment of hospital dietitians, as well as in their involvement in the community. Hospitals employed 379 dietitians (whole-time equivalents); 42 per cent of hospital groups did not employ dietitians and 23.5 per cent of established posts were unfilled. Only nine local authorities and three general practices employed dietitians. Most hospital dietitians gave dietary advice outside the hospital, though this was of limited extent and in many cases was an 'off-duty' occupation.

# HYGIENE IN THE HOSPITAL

## HOSPITAL INFECTIONS

See also Abstract No. 126

76. HARRIS, D. M. and GRAY, P. B. *Pseudomonas aeruginosa* **and the general hospital: a six-year survey.** *Journal of Hygiene*, London, 1974, Oct., vol. 73, no. 2, pp. 249-254.

The incidence of infections caused by *Pseudomonas aeruginosa* did not increase significantly between 1967 and 1972 among general surgical and medical patients at the 329-bed Royal Hospital, Sheffield; the majority of such infections were trivial. Serious infections were virtually confined to the intensive care unit and the renal transplant unit, and were usually associated with major trauma, surgical mishap or immunosuppression. The majority of these patients had received prior antibiotic therapy. Persistent isolation of *Ps. aeruginosa* from surgical wounds was often associated with severe intra-abdominal sepsis, and antibacterial therapy was commonly ineffective in these cases. Apparently susceptible patients did not necessarily acquire infection, though the organism was present in their environment. It is suggested that

this may reflect a variation of virulence among environmental strains of *Ps. aeruginosa*, and that further study of this aspect may contribute to improved control of infection.

77. MEYERS, J. D. and others. **Parenterally transmitted hepatitis A associated with platelet transfusions: epidemiologic study of an outbreak in a marrow transplantation center.** *Annals of Internal Medicine*, Philadelphia, 1974, Aug., vol. 81, no. 2, pp. 145-151.

Over a three-month period nine marrow transplant patients and six donor-members of their families had acute hepatitis. Screening revealed 21 sub-clinical cases among members of families, staff and donors. Platelet and plasma donation and platelet transfusion were found to be the source of exposure. Twenty-six of 29 platelet and plasma donors and nine of 13 receiving platelet transfusion developed evidence of acute heptatis A. This outbreak illustrates the risk of hepatitis for donors and recipients of platelets and plasma and suggests the need for a re-examination of procedures.

78. MEDICAL RESEARCH COUNCIL. WORKING PARTY ON POST-TRANSFUSION HEPATITIS. **Post-transfusion hepatitis in a London hospital: results of a two-year prospective study.** *Journal of Hygiene*, London, 1974, Oct., vol. 73, no. 2, pp. 173-188.

In a two-year survey at the Central Middlesex Hospital 768 patients were seen and tested at frequent intervals after transfusion of whole blood. Eight patients were judged to have developed icteric and inecteric post-transfusion viral hepatitis. The methods used are described and details are given of the eight patients and of 35 patients with raised serum ALT without other clinical features of hepatitis. The findings are also compared with those from a control group of 1,489 patients. The overall incidence of hepatitis in this survey is low compared to that in other studies; possible factors in this difference are discussed.

## SOURCES OF INFECTION

See also Abstract Nos. 77, 78, 90, 92

79. GUNDERMANN, K.-O. Die Keimbelastung in verschiedenen Krankenhausbereichen. **[The bacterial content of various hospital departments.]** *Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene. 1. Abteilung Originale, Reihe B: Hygiene, Präventive Medizin*, Stuttgart, 1974, Oct., vol. 159, no. 3, pp. 231-243; summary in English, p. 231.

This paper analyses in detail the results of 62 series of investigations into bacterial contamination of the air and surfaces carried out in 29 different departments of 12 hospitals. Air contamination was lowest in maternity departments and nurseries, somewhat higher in operating departments, and considerably higher in medical and surgical wards. Surface contamination was higher in maternity departments than in surgical departments but was again considerably higher on the wards. Gram-positive organisms (particularly *Staphylococcus aureus*) were most frequent but coli bacteria and *Pseudomonas aeruginosa* were also common. The findings are compared with earlier published work and there are 46 references to the literature.

80. McGovern, J. S. and Jackson, J. G. **Study shows quick source for bacteria: foes among the flowers.** *Dimensions in Health Service*, Toronto, 1974, Sept., vol. 51, no. 9, pp. 29-30.

A series of tests at Saskatoon City Hospital showed that flowers kept in tap water, topped up as necessary, developed innumerable colonies of bacteria within one week. If 2.5 per cent or 5 per cent hypochlorite was added to the water there was no bacterial growth. Five per cent hypochlorite however was too strong for the flowers but the 2.5 per cent solution was sufficient to cut down odour and discolouration of the plants without affecting the life of the flowers.

81. Shawker, T. H., Kluge, R. M. and Ayella, R. J. **Bacteremia associated with angiography.** *Journal of the American Medical Association*, Chicago, 1974, Aug. 19, vol. 229, no. 8, pp. 1090-1092.

Positive bacterial cultures were obtained from catheters and guide wires or blood, or both, during 23 of 100 angiographic procedures. Most frequently contaminated were the catheters. In 11 cases, the organisms were of low virulence and may have represented air or skin contaminants. In 12 cases, however, Gram-negative bacilli of known pathogenicity were recovered. Transient bacteraemia was demonstrated in four cases, but in none did local infection of puncture or cutdown sites or prolonged bacteraemia leading to sepsis develop. Post-procedure temperature elevations were not proved to be related to catheter-induced infection.

## PREVENTION AND CONTROL

82. Copping, J. D. **Infection control: maintaining a safe environment.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Sept., vol. 16, no. 9, pp. 46, 48, 50.

Proper control of the patient's environment is everyone's concern but is the special responsibility of the infection control officer. This post should be held by a registered nurse, full or part-time, with broad general experience as well as experience in an isolation or burns unit. She should have some knowledge of microbiology, experience in public or industrial health and the right sort of personality. The officer will tour the hospital regularly observing the state of tidiness, cleanliness and hygiene, doing selective swabbing for microbiological studies of certain areas and fixtures and conducting air sampling studies. She will study procedures as they are written and as they are being carried out, especially in relation to nursing, housekeeping, laundry, catering, pharmacy, central sterilizing and staff health and hygiene. Information obtained by studies must be used to improve practices. As well as internal surveillance, inspections by the local health department and the Canadian Council on Hospital Accreditation may uncover some deficiencies that have been missed. Advice can also be obtained from outside consultants.

83. Fox, M. K., Langner, S. B. and Wells, R. W. **How good are hand washing practces?** *American Journal of Nursing*, New York, 1974, Sept., vol. 74, no. 9, pp. 1676-1678.

The hand washing practices of registered nurses, licensed practical nurses and nurses' aides in the general medical and surgical units of two hospitals were evaluated;

the practices of the three groups were also compared. The study involved counting the number of hand washes in a given period of time, correlating hand washing with specific activities, and evaluating the quality of hand washing techniques. The results demonstrate that most of the time nurses and aides did not wash their hands after a dirty activity. The three levels of staff were consistent, however, in that when they did wash their hands, the majority of hand washes followed a dirty activity. All levels of staff washed their hands more frequently when going from a dirty to a clean activity than from one dirty activity to another. The quality of hand washes did not meet the optimum requirements. In addition, the time spent on hand washing was far below the time recommended. The need for instruction on the importance of hand washing is stressed.

84. LILLY, H. A. and LOWBURY, E. J. L. **Disinfection of the skin with detergent preparations of Irgasan DP 300 and other antiseptics.** *British Medical Journal*, London, 1974, Nov. 16, vol. iv, pp. 372-374.

An evaluation of the relative effectiveness of two per cent hexachlorophane and 0.75 per cent Irgasan DP 300 bar soaps in disinfection of the hands showed that the former caused a significantly larger reduction in natural skin bacteria than the latter after one hand wash and after six hand washes, three on each of two successive days. Repeated use of Irgasan DP 300 bar soap caused a significantly greater reduction in skin flora than repeated hand washings with unmedicated bar soap, but there was no significant difference between them after a single use. Four per cent chlorhexidine detergent gave a larger mean reduction in skin bacteria than three per cent hexachlorophane detergent cream and two per cent Irgasan DP detergent solution after one hand wash and after six hand washings; two per cent Irgasan DP 300 detergent solution gave a poor and erratic reduction after a single hand wash. After six hand washings all three preparations gave large reductions in skin bacteria. The two per cent Irgasan preparation showed some residual activity on the skin after hand washing though less than with chlorhexidine and with hexachlorophane-chlorocresol detergent solution.

85. OAG, D. **A realistic approach to the Rosenheim report.** *Nursing Times*, London, 1974, Oct. 31, vol. 70, no. 44, pp. 1691-1695.

The Rosenheim report reviewed relevant current knowledge and made recommendations for the prevention and containment of hepatitis in regular dialysis and renal transplantation units. This paper reports a survey in seven hospitals of the extent to which the recommendations have been carried out and how effective they have proved. The results are presented in tabular form and discussed. The percentage of non-compliance with the recommendations appears to be very low, though it is also difficult to assess practical application of policies from written answers and hasty telephone conversations with colleagues. Some of the difficulties of complying are discussed.

86. ROBERTSON, M. H. **The provision of bacteriologically safe infant feeds in hospitals.** *Journal of Hygiene*, London, 1974, Oct., vol. 73, no. 2, pp. 297-303.

Infant feeds, to be safe, must be free from potentially pathogenic organisms but not necessarily sterile. In-bottle terminal heating is the preferred means of producing

such feeds and the advantages and disadvantages of high and low pressure heating methods, including the effect upon the food value of the feeds, are discussed. The safety of a low pressure method in use at Princess Alexandra Hospital, Harlow, is described. The choice between terminal heating in a central milk kitchen or obtaining a commercial supply should be decided on economic grounds. Hospitals using commercial supplies, however, should make provision for training mothers in the hypochlorite method of disinfection of bottles and teats, and also ensure that their trainee nurses and midwives still receive adequate instruction in the hygiene of feed preparation.

87. AYLIFFE, G. A. J., COLLINS, B. J. and DEVERILL, C. E. A. **Tests of disinfection by heat in a bedpan washing machine.** *Journal of Clinical Pathology*, London, 1974, Sept., vol. 27, no. 9, pp. 760-763.

Tests of the effectiveness of disinfection of non-disposable bedpans, made of metal or polypropylene, were made in a washer fitted with a steam generator. Tests of bactericidal efficiency are difficult to interpret on machines which wash and also disinfect, so a test was designed which excluded the effects of washing, based on a method first described in 1972. Broth cultures of *Escherichia coli*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* or *Streptococcus faecalis* (approximately $4 \times 10^8$ organisms) were sealed in lengths of capillary tubing and attached by autoclave tape to the following sites on the bedpan: (i) internal surface of the base; (ii) external surface of the seat; and (iii) under the rim. To test the effectiveness of both the cleaning and disinfection processes, a suspension of *Streptococcus faecalis* was added to standard soil (B.S. 2745, 1966), and the mixture was applied to the internal surface and seat areas and allowed to dry. Sample swabs were taken before and after cleaning, and counts of surviving organisms made, as in the previous tests. The capillary tube tests show Gram-negative bacilli were effectively killed, but not necessarily Gram-positive cocci. Results with polypropylene bedpans were less good. Results in the second test using standard soil varied according to how long the soil had been allowed to dry. Soil was more effectively removed soon after its application, and results were better from metal bedpans. It is important that water used in the washer should be above 50°C. The author also raises the question of discontinuing the routine disinfection of bedpans, since washers are so expensive. Modifications of the washer are suggested.

88. KANZ, E. UV-Luftentkeimung im Operationssaal und in Spezialpflege-bereichen. **[Ultraviolet air decontamination in the operating theatre and special care units.]** *Krankenhausarzt*, Karlsruhe, 1974, Sept., vol. 47, no. 9, pp. 497-498, 500, 502, 504, 506, 508-510, 512.

A comprehensive series of experiments is described which have been carried out to test the efficiency of direct ultraviolet radiation and radiation by means of an ultraviolet 'barrier' or 'curtain' on bacterial content of air in operating theatres and other special areas (intensive care units, transplant units, burns units, etc.). These tests show that ultraviolet radiation can greatly reduce air contamination: while direct radiation can only be used when an operating theatre is not in use the 'barrier' or 'curtain' can be used throughout. It is stressed that while ultraviolet radiation alone cannot solve the problems of infection in such special areas it is an important link in the chain of suitable measures.

89. TALBOT, J. M. **Disinfection of anaesthetic equipment.** *Health and Social Service Journal*, London, 1974, Oct. 5, vol. 84, no. 4407, p. 2296.

The Scott CX500 machine was designed to prevent infection of anaesthetic facemasks and tubing. This paper reports a test of its efficacy against *Mycobacterium tuberculosis*. The machine had previously been successful against *Staphylococcus aureus* and *Pseudomonas aeruginosa*. The test organism in this experiment was *Mycobacterium smegmatis*, which is non-pathogenic to man and frequently used in tests as a model for *M. tuberculosis*. The test pieces and controls were subjected to the normal cycle in the machine, and the results are tabulated in the paper. They showed that the normal cycle deals satisfactorily with mycobacteria, and the inclusion of activated glutaraldehyde (Cidex) as a routine procedure in the washing cycle is an added safeguard, but not essential. A photograph of the machine is included.

## HYGIENE IN THE OPERATING THEATRE

90. HILL, J., HOWELL, A. and BLOWERS, R. **Effect of clothing on dispersal of *Staphylococcus aureus* by males and females.** *Lancet*, London, 1974, Nov. 9, vol. ii, pp. 1131-1133.

A study of 238 men and 377 women laboratory technicians, doctors and nurses working in Northwick Park Hospital and the Clinical Research Centre showed that 30 (13 per cent) of the men shed *Staphylococcus aureus* (some very profusely) whilst only five (one per cent) of the women shed the organism and only in smaller numbers. Nasal carriage of *St. aureus* was detected in 28 per cent of the men and 27 per cent of the women. The three most profuse male dispersers took part in experiments to determine the role of clothing and one in a trial of ventile underpants. The results show that shedding from the skin is increased by friction from clothes. Dispersal seemed to be almost exclusively from the perineal area and was apparently prevented in the operating theatre by closely-woven ventile underpants and a conventional operating suit, a much more comfortable outfit than a complete ventile suit.

91. LOWBURY, E. J. L., LILLY, H. A. and AYLIFFE, G. A. J. **Preoperative disinfection of surgeons' hands: use of alcoholic solutions and effects of gloves on skin flora.** *British Medical Journal*, London, 1974, Nov. 16, vol. iv, pp. 369-372.

A single application of about 10ml. of 95 per cent alcoholic chlorhexidine (0.5 per cent) or tetrabrom-o-methyl phenol (0.1 per cent) rubbed on the hands until they were dry led to mean reduction of viable bacterial counts from standard handwashings of 97.9 $\pm$ 1.09 per cent and 91.8 $\pm$ 4.63 per cent respectively. After six of such treatments, three on each of two successive days, the mean reductions in relation to viable counts before the first treatment were 99.7 $\pm$ 0.09 per cent and 99.5 $\pm$ 0.17 per cent respectively. These reductions were greater than those obtained with four per cent chlorhexidine detergent solution, 95 or 70 per cent ethyl alcohol and aqueous 0.5 per cent chlorhexidine. Pre-operative washing of the surgeon's hands with alcoholic chlorhexidine used without addition of water is more effective and less expensive than handwashing with antiseptic detergent preparations and running water. Viable counts were lower when gloves had been worn for three hours than immediately after treatment with

various antiseptics. Tests for residual action of antiseptics on the skin showed a greater effect with alcoholic chlorhexidine than with tetrabrom-o-methyl phenol, though both showed greater residual activity than Irgasan DP 300 detergent preparation. No residual action was shown after 70 per cent ethyl alcohol.

92. MITCHELL, N. J. and GAMBLE, D. R. **Clothing design for operating-room personnel.** *Lancet*, London, 1974, Nov. 9, vol. ii, pp. 1133-1136.

Experiments in a test chamber showed that aerial dispersal of skin bacteria was reduced by about 80 per cent in male subjects wearing an experimental operating suit made of closely-woven ventile fabric. In a limited trial the suit was found acceptable by theatre staff. Underpants made of ventile fabric reduced dispersal by 80 per cent in the unclothed subject but were less effective when worn under clothing. This happened both for total bacterial counts and, in one subject, for counts of *Staphylococcus aureus*. Only one per cent of young women and five per cent of postmenopausal women were *St. aureus* dispersers. The wearing of stockings increased the dissemination by young women of skin bacteria from the legs.

## STERILIZATION

93. CENTRAL STERILISING CLUB. **Sixteenth annual meeting, Leeds, 1974.** *Health and Social Service Journal*, London, 1974, Oct. 5, vol. 84, no. 4407, suppl. pp. 1-25.

The papers given at this meeting were on: the administrator's problems when planning hospital hygiene; the role of the central sterile supply department; disinfection of lung ventilators; the problem of the bedpan; carpets in hospital wards; education of hospital staff in methods of hygiene; hospital food and infection; and the hygiene of dialysis—home and hospital.

94. NYSTRÖM, B. **Handling sterile products in the hospital.** *ASSA Journal*, Matlock, 1974, Sept., vol. 3, no. 1, pp. 8-10, 12.

A sterile product is usually described as being free from viable micro-organisms, but a more meaningful definition would be one made in statistical terms, as a defined margin of safety against non-sterility. This safety margin needs to be ensured both by the manufacturer of the product and by the hospital where it is stored and used. It is the manufacturer's responsibility to produce a product well sterilized in a controlled sterilization apparatus. It should be packed in several layers, namely the innermost or product package, the user package in which the product is stored and handled, and the transportation package, containing several user-packaged products. The product's shelf life should also be indicated where appropriate. The hospital's responsibilities to ensure the product's sterility at the time of use are: (i) not to allow transportation packages into hygienically controlled environments; (ii) not to allow other non-sterile products into sterile stores; (iii) centralized and non-centralized sterile stores should be clean and well ventilated; (iv) internal transport of sterile products must protect them adequately, particularly from mechanical damage and dust; (v) the shelf life of all sterile products must be limited, bearing transport conditions and storage factors in mind; (vi) all staff handling sterile products must be properly

trained and supervised; and (vii) products intended for single use should not be resterilized and reused.

95. COLLANTINE, S. R. **A supporting service for CSSDs.** *ASSA Journal*, Matlock, 1974, Sept., vol. 3, no. 1, pp. 16, 17.

The contribution made by the Rotherham Adult Training Centre, which caters for mentally handicapped adults from 16 years of age, to the central sterile supply department (CSSD) at Moorgate Hospital, Rotherham, is assessed. In 1960, the centre began to provide simple dressings for the Rotherham group of hospitals, which had no CSSD. When the Moorgate CSSD opened, the range of dressings provided was widened. The 88 trainees at the centre now provide a relatively cheap and efficient service for the CSSD, which in turn serves 11 hospitals in the area. Whether purpose built or converted, many CSSDs lack storage space, and the use of the centre helps alleviate this problem. Also, prepacked supplies from industry are often expensive, deliveries may sometimes be uncertain, and packs often contain substituted or inferior items due to shortages of raw materials. The centre can provide packs quickly to meet the CSSD's exact specifications and has a reliable daily delivery service. Prices for packing are mutually agreed upon and periodically reviewed by the Rotherham Social Services Department and the hospital, and so remain steady. Psychiatric units in new district general hospitals might also be able to provide a similar service to CSSDs if problems of storage and lack of suitable staff could be overcome.

### AIR HYGIENE

See also Abstract No. 88

96. BAKELS, M. and ANSPACH, W. E. **Is clean air necessary?** *NATNews*, Matlock, 1974, Sept., vol. 11, no. 7, pp. 25, 27, 30.

Clean air in the operating theatre reduces the number of airborne particles. The vertical and horizontal air flow systems both have their disadvantages. What is recommended is a compromise which might be called 'second generation'. The air source is angled downward between eight and 18 degrees and is basically a modified horizontal system. The air movement maintains a continuous flushing action over the contour of the patient and the blanket of clean air forms a barrier difficult for particles to penetrate. Particles shed by the surgeon's arms and hands, or falling into the air blanket, are carried away on the periphery and do not come into contact with the surgical wound or the drapes.

## SAFETY MEASURES

### FIRES AND FIRE PREVENTION

97. WHITE, D. C. **Fire precautions in small hospitals.** *Health and Social Service Journal*, London, 1974, Oct. 12, vol. 84, no. 4408, pp. 2358-2359.

While the basic principles of fire prevention and control apply to all hospitals there are certain factors which particularly affect the small hospital. These include: though

small many supply services are comparable with those of larger units; total staff for helping in an emergency is small; few small hospitals have automatic fire detection and alarm systems; male staff on duty or on call may be small or non-existent; few staff can be released for training; and few small hospitals have an administrator who can devote much time to fire prevention matters. Important are a direct telephone line to the nearest fire brigade control room, an 'annunciator panel' indicating site of fire within the hospital, and special evacuation sheets (with cross-straps and carrying straps) fitted individually to beds as a permanent precaution. Staff training in small hospitals is particularly important: there should be frequent lectures and exercises.

98. NORSKE SYKEHUSFORENING. Problemer for sykehus og sykehjem som følge av gjeldende brannforskrifter. **[Problems for hospitals and nursing homes arising from the current fire regulations.]** *Sykehuset*, Oslo, 1974, vol. 37, no. 5, pp. 216-248.

A six-man committee was appointed in 1973 to draw up fire regulations for hospitals and other medical institutions. The current regulations were drawn up with hotels and restaurants in mind, and the 'heavy' structural elements required conflict with the functioning of a hospital. The fact that the main element of danger is smoke and hot gas rather than flame must be taken into consideration in both design and purchasing as well as in any revision of the regulations. Liberalization of the current building regulations would offer significant financial and environmental advantages. The paper concludes with a worked example for calculating the fire loading of a two-bedded room, and an item-by-item comparison of the costs of construction, ventilation and administration in a hospital and a nursing home under the current and the proposed revised (liberalized) fire regulations. A list of 34 references to the literature is included.

99. Seminar for brannforskriftene for sykehus og helseinstitusjoner. **[Seminar on fire regulations for hospitals and health establishments.]** *Sykehuset*, Oslo, 1974, vol. 37, no. 5, pp. 249-285.

A two-day seminar on fire regulations, attended by 63 delegates, was held in March 1974 to discuss the architectural and administrative implications of Norwegian legislation introduced since 1963. Group discussions were held after the papers were read, and the final, plenary session is also reported. Papers were given on: current laws and regulations, and their application; architectural considerations; relationship between function and environment in hospitals and other health institutions from the point of view of the fire regulations; freedom of movement in a hospital, with special reference to the therapeutic situation; and fire regulations in health institutions other than hospitals.

## RADIATION HAZARDS

100. WORLD HEALTH ORGANIZATION. **Manual of radiation protection in hospitals and general practice. Volume 1. Basic protection requirements, by C. B. Braestrup and K. J. Vikterlöf.** Geneva, World Health Organization, 1974, 81pp.

This is the first volume of a series dealing with the radiation protection of patients, occupationally exposed persons and the public and written for the reader with a basic

general knowledge of radiation and biology. The present volume is a general review of the radiation protection requirements common to all medical applications of ionizing radiation and radionucleides. It covers: general considerations; principal objectives of radiation protection; radiation equipment and operating procedures; planning of radiation facilities; shielding design; organization of radiation protection; radiation surveys; and staff monitoring and health supervision.

101. ZERLETT, G. Die Durchführung der Röntgenverordnung im Krankenhaus. **[The application of X-ray legislation in the hospital.]** *Krankenhaus*, Stuttgart, 1974, Oct., vol. 66, no. 10, pp. 395-402.

The X-ray Regulations, promulgated by the Federal Republic of Germany on 1 March 1973 and which came into force on 1 September 1973, are an important part of West German legislation which lays down stringent provisions for the protection of persons exposed to X-rays during the course of their work, as patients, or in other ways. This paper summarizes the main provisions, and comments on them, with particular reference to hospital requirements.

# THE PATIENT

## WELFARE OF THE PATIENT

See also Abstract Nos. 143, 145

102. MORGAN, D. **Opinion polls provide valuable feedback: ask the patient.** *Dimensions in Health Service*, Toronto, 1974, Oct., vol. 51, no. 10, pp. 12, 14, 16, 18.

A study of patient satisfaction was undertaken at Parkwood Hospital, London, Ont., a 186-bed extended care and rehabilitation hospital for the chronically ill. Items covering a wide range of topics designed to tap patient satisfaction with hospital management and nursing care were collected and 68 were used in a questionnaire. Three female interviewers collected the data in semi-structured interviews. The interviews lasted an hour and the purpose of the study was explained to the patient. Patients were rated according to their ability to answer the questions and over 80 per cent were considered either capable or possibly capable of taking part. Of these every second patient was chosen to respond to the questionnaire. The study identified six factors which contributed to patient satisfaction: (i) overall satisfaction; (ii) security; (iii) adequacy of patient care; (iv) food, bed and activity; (v) availability of staff; and (vi) interpersonal sensitivity. The replies were considered in relation to the patient's sex, age, type of care, previous admission, diagnosis and length of stay. The study demonstrated a high level of satisfaction and a separate percentage analysis for each of the factors showed that only 16 per cent of the respondents provided unsatisfactory or uncomplimentary replies.

103. RAVICH, R. and REHR, H. **Ombudsman program provides feedback.** *Hospitals*, Chicago, 1974, Sept. 16, vol. 48, no. 18, pp. 62-67.

Mount Sinai Medical Center, New York, established a system of patient representatives in 1967 [see *Hospital Abstracts*, Vol. 9, Abstract 1588]. In addition to solving

patients' problems and providing liaison between community and hospital, the service has a feedback system the purpose of which is to effect change or modify hospital procedure and policy when experiences of individual patients demonstrate such need. This paper describes how this system works and outlines some examples.

104. RAPHAEL, W. **Survey of patients' opinion surveys in hospitals.** (King's Fund Project Paper No. 9). London, King's Fund Centre, 1974, 22pp.

The aim of this report is to help those planning surveys of patients' opinions on hospital care by summarizing the experience of others. It is based on reports of 173 surveys conducted by 72 hospital groups or teaching hospitals since 1968. The report is in three parts: (i) descriptions of the different types of survey used; (ii) application of survey results; and (iii) changes in level of satisfaction over the years.

105. COLSON, J. **Information, please.** *World Medicine*, London, 1974, Sept. 25, vol. 9, no. 36, pp. 83, 85-86.

The orthopaedic department at Leeds (St. James's) University Hospital has been running a pilot information service based on cassette tapes for the last few years. The aim is to get information across to patients in simple practical terms. The tapes, which cover the after-care of some of the more common types of orthopaedic conditions, are based on scripts prepared by the nursing staff under the guidance of the senior orthopaedic consultant. Extracts are given from two of the most widely used tapes.

106. EVANS, M. W. **An introduction to health education in hospital.** *Nursing Mirror*, London, 1974, Oct. 10, vol. 139, no. 15, pp. 49-50.

Apart from group health education of expectant mothers and diabetics, there has been very little attempt by hospitals to promote health education on a systematic basis. There are three ways in which hospitals can be involved: (i) health education of the hospital patient; (ii) health education of the hospital staff; and (iii) health education of the community served by the hospital. The principles concerned in each and suitable methods are outlined.

107. SWAMIDASS, A. and O'BRIEN, E. **A hospital program toward physical fitness.** *Dimensions in Health Service*, Toronto, 1974, Sept., vol. 51, no. 9, pp. 8-10.

In 1973 the Central Newfoundland Hospital at Grand Falls initiated a keep fit class for men and women supervisors from local industries. The course ran for 12 consecutive weeks. It consisted of 45 minutes of continuous exercises conducted by a physiotherapist who explained the reason for each movement; lectures on mental hygiene by a social worker; and dietary counselling by a dietitian. Participants were screened medically and their vital performance was monitored before, during and after exercise.

108. WAITE, M. **Patient concern.** *Health and Social Service Journal*, London, 1974, Oct. 26, vol. 84, no. 4410, pp. 2482-2483.

For an experimental period of three months a stand was set up in the main out-patient hall at King's College Hospital, London, to give information on services for patients. It was stocked with leaflets from some 40 voluntary organizations and

brochures describing statutory rights and benefits. It was manned all day by someone able to answer questions and who could record the use made of the stand. Over the period the stand was used by 833 people (84 of them members of the staff of the hospital or other bodies). The most popular leaflets were those from Age Concern, the British Rheumatism and Arthritis Association, the Disabled Living Foundation, and the Migraine Trust. Some patients pointed out gaps in the material. As a result of the interest shown by staff a number of voluntary organizations have sent speakers to talk to them about their work. Although it would be desirable for the stand to be staffed on a permanent basis it has not been possible to do so in recent months.

## VOLUNTARY SERVICE, VOLUNTARY WORKERS

109. WHATELEY, L. **Yesterday, today, and tomorrow: history of the National Association of Leagues of Hospital Friends.** London, Law and Local Government Publications, 1974, 153pp. £0.50

The National Association of Leagues of Hospital Friends was founded in 1949. This volume not only traces its development but also gives brief details of many of the individual leagues founded before and after the establishment of the Association.

## THE GENERAL PRACTITIONER AND HIS PATIENTS

110. MELKER, R. A. de. **The relationship between the family doctor and the hospital.** *Journal of the Royal College of General Practitioners*, Edinburgh, 1974, Oct., vol. 24, no. 147, pp. 703-709.

This paper reports a survey of the opinions of 361 patients in four hospitals and a representative group of Dutch general practitioners and of specialists, as well as on the results of an investigation in three practices of the Nijmegen University Department of General Practice. Two conclusions are drawn: (i) the general practitioner can fulfil an important role for his patients in hospital, which arises from his function as a doctor to the family and is complementary to the technical specialists' work in hospital; and (ii) a strict referral and hospital admission policy by the general practitioner has important consequences and gives him a key position in health care, enabling him to promote the shift from hospital-centred to domiciliary-centred care which is now generally considered to be necessary. It seems likely that such a strict referral system means a better quality of medical care for patients. This is a priority of the first order, greater than that of perfecting hospital medical care, which will require an ever-increasing effort and cost for a decreasing group of patients.

## HOSPITAL CARE

See also Abstract Nos. 51, 139, 146-148

111. DIJKMAN, F. J. M. Patiëntenaccommodatie buiten de verpleegeenheid. **[Patient accommodation apart from the nursing unit.]** *Ziekenhuis*, Utrecht, 1974, vol. 4, Oct. 2, no. 19, pp. 486-490.

In order to prepare patients for discharge they should be encouraged to spend as

much time as possible away from the ward. This applies even to patients who are not really ambulant but require a wheelchair. While this creates difficulties for nursing staff it should be possible for most patients who can do so to leave the ward for at least a few hours. Those sufficiently mobile should take their meals in the restaurant and should use sitting and recreation rooms away from the ward. Provision should be made for hairdressing and chiropody, there should be kiosks, 'coffee shops', and patients should be encouraged to use the library. It should be possible to receive visitors in rooms away from the wards. As a further stage in recovery some patients could be allowed home for week-ends. Telephones for patients should be provided in suitable rooms where they can sit in comfort—not on draughty landings or in corridors.

112. WILKES, E. and others. **Symposium: care of the dying.** *Nursing Mirror*, London, 1974, Oct. 10, vol. 139, no. 15, pp. 53-70.

The eight papers in this symposium are on: relatives, professional care and the dying patient; approach to death; the nurse's contribution in terminal care; ethical questions in the care of the dying; the priest's care of the terminally sick; caring for the bereaved; the Hostel of God, Clapham Common, London; and the care of the dying in North America.

113. YURA, H. and WALSH, M. B. **The nursing process: assessing, planning, implementing, evaluating. 2nd edition.** New York, Appleton-Century-Crofts, 1974, ix, 215pp. £4.15

This book is divided into five chapters: (i) a brief review of the historical background and current ideas on the nursing process; (ii) a review of some of the theories fundamental to and related to the nursing process; (iii) analysis and discussion of phases of the process; (iv) suggested applications of the nursing process; and (v) future potential in terms of study and research. An extensive bibliography is included.

114. MARRAM, G. D., SCHLEGEL, M. W. and BEVIS, E. O. **Primary nursing: a model for individualized care.** Saint Louis, Mosby, 1974, 174pp. £2.80

Primary nursing is defined in this book as the distribution of nursing so that the total care of an individual patient is the responsibility of one nurse, not many nurses. The authors discuss this approach to nursing care in depth and explain the advantages of primary nursing over other existing nursing systems, its operation and its effects on patients, doctors and nurses. They also highlight several technological and professional trends that make primary nursing the most logical means of caring for patients and their families today.

115. GERMAINE, A. **How do we assess the quality of care?** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Sept., vol. 16, no. 9, pp. 42-44.

This paper lists 12 points by means of which the quality of nursing care can be assessed. These are: (i) a patient questionnaire sent out after the patient's discharge to find out what he thought of his care; (ii) the minutes of committee meetings, to assess the value of the committees; (iii) medication error reports; (iv) incident reports which deal with losses to patients, circumstances relating to falls, burns, etc.; (v) nursing history forms; (vi) nursing care plans; (vii) performance appraisal records

which spell out the strengths and weaknesses of the staff; (viii) unit and staffing statistics which help to justify the need for staff and indicate the need to examine areas that seem to be causing problems in the skill and art of nursing; (ix) observation; (x) utilization studies; (xi) unit objectives; and (xii) nursing audits.

116. KALB, R. J. and others. **Program monitors all services.** *Hospitals*, Chicago, 1974, Sept. 1, vol. 48, no. 17, pp. 43-45.

A quality assurance programme at Montefiore Hospital and Medical Center, Bronx, N.Y., is described. Departmental heads identified the 10 most important attributes of the services they provided. Acceptance criteria for each attribute were then established and these were reviewed by a team of administrators, nurses and management engineers. Following minor modifications a quality assurance manual was compiled listing the attributes and acceptance criteria for each department. A nucleus of people to perform evaluations was chosen from department heads and administrators. Because initally each of the 30 departments would be evaluated twice a week 60 evaluators were chosen. It was found that each evaluation took an average of 30 minutes. A typical evaluation sheet is reproduced in the paper. The evaluator completes this using the quality assurance manual as a guide. The sheets go to the quality engineer for tabulation and are then returned to the appropriate department head for corrective action if necessary. A quality assurance control chart for the whole hospital is prepared weekly. Procedures which have developed from the programme include: monthly summary reports; monthly review meetings; awards for improvements in quality, made monthly; and monthly meetings of evaluators. The programme has proved very successful.

117. TROUT, F. **Three methods of nursing audit.** *Dimensions in Health Service*, Toronto, 1974, Sept., vol. 51, no. 9, pp. 38-40, 43-44.

The primary objective of the nursing audit is to improve patient care. This paper describes three different types of nursing audit and sets out the advantages and disadvantages of each. The first is the 'retrospective process audit' which evaluates the quality of care by appraising the nursing process as reflected in the records of discharged patients. The second type, the 'retrospective outcome audit', uses the records of the clinical aspects of nursing management: it uses a broad-based nursing committee which audits charts requiring professional judgment which have been selected because they deviate from the committee's standards. The third method is the 'bedside or concurrent audit'. This aims at determining the quality of individual patient care by observing how care relates to needs, and identifying areas of patient care which need to be emphasized in relation to staff development and the avoidance of medico-legal complications.

## HOME CARE, AFTER-CARE

See also Abstract No. 129

118. HUGHES, O. P. and GERSON, L. W. **Evaluating the economics of home care: a method.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Sept., vol. 16, no. 9, pp. 22, 24, 26, 29.

The problems of making a real comparison between the costs of hospital and home

care are considered and a method currently in use is described. Two equations are given, one which expresses all the variables associated with the costs of patient care either at home or in hospital and another which is used for hospital funding in Canada. It is pointed out that only certain direct costs such as housekeeping and food vary with the patient's length of stay and other direct costs vary with the number of visits by professional staff or with the level of care. Reference is made to the instrument devised by MacDonnell for measuring direct and indirect nursing care [see *Hospital Abstracts*, Vol. 11, Abstract 1202]. This assigns a numerical value based on difficulty of performance to each of a specific list of nursing items. To determine a dollar cost for each point on the inventory is simple: (i) add the total amount of points of care given to all patients in the study period; (ii) determine the dollar amount spent on nursing during that period; (iii) divide the latter by the former to get a unit cost per point. To compare home care with in-patient care the relevant direct costs in each location for equivalent groups of patients in equivalent time periods are aggregated. After dividing these figures by their appropriate length of stay parameters in each case suitable comparisons can be made. Economic costs are not the only factor to consider in comparing hospital and home care, the clinical and psychosocial benefits must also be looked at.

# SPECIAL DEPARTMENTS

## WARDS

See Abstract No. 66

## OPERATING SUITES

See also Abstract Nos. 15-17, 49, 88, 90, 92, 96

119. LITONSKI, B. Klimaanlage als Entkeimungseinrichtung der OP-Raumluft. **[Air-conditioning as a decontamination unit for the air of operating theatres.]** *Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, 1.Abteilung Originale, Reihe B: Hygiene, Präventive Mediẻin*, Stuttgart, 1974, Oct., vol. 159, no. 3, pp. 244-271; summary in English p. 244.

A detailed study of air-conditioning plants in operating theatres concludes that they can be effective in eliminating airborne micro-organisms if certain technical requirements are met and there is regular maintenance. It is important that reasonable limits, which can be properly monitored, be laid down for air contamination in the different zones of the theatre. The taking of samples and the techniques for measuring should be standardized. A recommended system whereby the current of clean air falls directly on the operation, with air curtains screening the working area from the rest of the theatre, is described and illustrated: the used air is eliminated via an outlet under the operating table. It is stressed that even an effective air-conditioning system will have no effect on contamination by direct or indirect contact with infected surfaces, objects or persons and measures to control this must be enforced as strictly as ever.

120. OSTERTAG, H. Lufthygienische Untersuchungen an der Dräger-Keimfilteranlage für OP- und Spezialpflegebereiche mit unzulänglicher Klimaanlage. **[Air purity studies on the Dräger germ-filter plant for operating theatres and special care areas with inadequate air-conditioning systems.]** *Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene. 1.Abteilung Originale, Reihe B: Hygiene, Präventive Medizin*, Stuttgart, 1974, Oct., vol. 159, no. 3, pp. 209-230; summary in English pp. 209-210.

The Drager germ-filter plant, which can be incorporated into an existing air-conditioning installation, contains high performance suspended-substance filters combined, as an additional safety measure, with ultraviolet emitters for irradiating the filter surfaces. An additional blower can be installed to improve the air output system. Tests (which are described in detail with the results set out in a series of tables) have shown that this apparatus can free from micro-organisms the air flowing into operating theatres.

## ANAESTHESIA

See also Abstract No. 89

121. BURN, J. M. B. **Preoperative anaesthetic assessment clinic.** *Lancet*, London, 1974, Oct. 12, vol. ii, pp. 886-888.

A pre-operative anaesthetic assessment clinic, which has been in existence at Southampton for the past three years, is described and its work evaluated. The customary visit of the anaesthetist to patients on the evening before their operations is regarded as unsatisfactory, since there is then inadequate time for the patient, if unfit, to be made fit for the operation, for drugs which might react with anaesthetic agents to be discontinued, or for an unfit patient's place on the operating list to be refilled. Consequently all surgical patients, except for neurosurgical or cardiothoracic patients who are generally admitted early for tests, are seen two weeks before their operations at the weekly anaesthetic assessment clinic in the out-patient department. A thorough medical examination is given, and since patients meet the anaesthetist who will be present at their operation he is able to allay any fears they may have. Patients who fail to attend the clinic are contacted, so that there is time to examine them or replace them on the operating list before the scheduled operation. It appears that the extra time spent by patients and anaesthetists attending the clinic is well spent as it minimizes the risk to patients.

## PHARMACY

122. BASSILI, A. R. and MCMAHON, M. E. A. **Bridging the pharmacy-nursing communications gap.** *Hospital Administration in Canada*, Don Mills, Ont., 1974, Sept., vol. 16, no. 9, pp. 30, 32-34.

This paper describes a study undertaken at Kingston General Hospital, Kingston, Ont., with a view to improving communications between nurses and pharmacists. Kingston General is a 537-bed teaching hospital with a pharmacy staff of six pharmacists, two pharmacy technicians, a secretary and a storekeeper. The study was conducted by a pharmacist and a nurse and a questionnaire was devised to meet

specific objectives, including: (i) the improvement of communication channels; (ii) to provide nurses with an opportunity to judge the pharmacy service, to suggest improvements and to determine their reactions to new developments; (iii) to determine the sources of information about drugs available to nurses and the order of preference given to these sources; and (iv) to establish ways in which pharmacists can contribute to improved patient care. A total of 385 questionnaires were distributed, 264 of which were returned. Data resulting from the questionnaire were analysed by computer. The findings are summarized in the paper and illustrated by several tables and diagrams. Thirteen recommendations were made and these too are summarized. The communication gap has been slightly bridged since the study and a few minor improvements have been made in the pharmacy service.

123. BAECKER, R. **A study of automated information processing systems in drug reaction surveillance and reaction prevention.** *Computers and Biomedical Research*, New York & London, 1974, Oct., vol. 7, no. 5, pp. 457-488.

This paper is a state-of-the-art survey which develops a framework for the classification and critical evaluation of drug reaction information systems, then applies that framework to analyse major existing programmes in drug reaction surveillance and reaction prevention. The main systems included are: Boston Collaborative Drug Surveillance Program; Kaiser-Permanente Drug Reaction Monitoring System; Los Angeles—University of Southern California Drug Utilization Review System; and Stanford Drug Interaction Detection and Prevention System. The paper suggests a number of methods, technical and administrative, for increasing the cost-effectiveness of drug reaction information systems.

124. BRONSON, S. A. and others. **Centralized IV admixture service in a cancer research hospital.** *Hospital Topics*, Chicago, 1974, Sept./Oct., vol. 52, no. 8, pp. 25-27.

A centralized intravenous (IV) additive service has responsibility for the preparation of non-emergency IV solutions plus medications in volumes of 50ml. or more at the 294-bed M. D. Anderson Hospital and Tumor Institute, Houston, Texas. About 85 per cent of the 600 intravenous fluids administered daily require the addition of medications to commercially available solutions. The procedures followed are described. Features of the system include: (i) an IBM-Centrac unit, which has 24 hourly time slots in which schedule cards are placed under the first scheduled administration time for preparation at the appropriate time; and (ii) an IBM Magnetic Card Selective Typewriter which is used for the preparation of labels.

## LABORATORIES

125. CAVILL, I. and RICKETTS, C. **Automated quality control for the haematology laboratory.** *Journal of Clinical Pathology*, London, 1974, Sept., vol. 27, no. 9, pp. 757-759.

This paper describes a quality control system which has been in operation in the laboratory at the University Hospital of Wales. The intralaboratory quality control data have been analysed using two different methods. In the first, a plastic grid was

used to assess the cumulative sum (cusum) graph, which gives a sensitive reflection of the accuracy of the control data. The second method, carried out by the laboratory computer, gives automated on-line quality control of the Coulter S blood counter. Both these methods use sophisticated statistical methods, and the second could probably be carried out by a much simpler computer or an electronic calculator. The rapid and accurate evaluation of the control data has relieved the laboratory staff of much tedious work, whilst still maintaining active quality control over the 500 samples analysed by the Coulter S each day.

126. ULDALL, A. **Occupational risks in Danish clinical chemical laboratories.** *Scandinavian Journal of Clinical and Laboratory Investigation*, Oslo, 1974, Feb., vol. 33, pp. 21-29.

An enquiry covering most clinical chemistry laboratories in Denmark revealed that hepatitis, burns and cuts are the most common causes of injury to the staff. The cause of most of the dangerous episodes with centrifuges was the construction of the tube carrier and its mounting system. Various actions for avoiding injuries are suggested. There were 30 clinical cases of hepatitis in 59 laboratories during 1968 to 1973 (2.3 per year per 1,000 employees). Attack rates were highest in laboratory technicians and dishwashers. All cases but one had direct contact with patient blood. In one-third of these, exposure to known infectious material was recorded. Prophylactic precautions are reviewed.

## DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract Nos. 100, 101

127. KOLODNY, G. M. **Access of radiology reports.** *Radiology*, Syracuse, 1974, June, vol. 111, pp. 597-601.

Delay in making diagnostic X-ray reports available to referring doctors is a serious problem, accounting for as much as $1,500,000 per year in health costs at a large city hospital. Components of an ideal system which would provide rapid access to reports are discussed and various alternative systems are analysed. It is suggested that telephone access to the radiologist's oral report would meet many of the requirements, but there are major limitations to the commercial equipment now available. An original system designed to meet the requirements has been developed [see Abstract 128].

128. KOLODNY, G. M., COHEN, H. I. and KALISKY, A. **Rapid-access system for radiology reports: a new concept.** *Radiology*, Syracuse, 1974, June, vol. 111, pp. 717-719.

It has been suggested that telephone access to radiology reports would solve the problems of delays in diagnosis [see Abstract 127]. This paper describes such a system. The radiologist dictates his report in the usual manner, using a standard microphone handset, first keying in the patient's identification number. Each dictation is stored as a separate memory unit record in a central analogue memory retrieval facility after being coded with the patient's number and other descriptors. The system is controlled by a dedicated computer switching device and is designed to store and transcribe an

unlimited number of reports simultaneously. To retrieve a report, the referring doctor telephones the central memory facility, using standard telephone lines, and dials the patient's identification number. Within a few seconds he hears the radiologist's report. A block diagram of the system is included.

## RADIOTHERAPY DEPARTMENT

See Abstract Nos. 100, 101

## REHABILITATION

See also Abstract Nos. 131, 149

129. JOHNSON, B. W. **Help for rural hospitals: the travelling rehab. team.** *Dimensions in Health Service*, Toronto, 1974, Sept., vol. 51, no. 9, pp. 47-49.

Calgary General Hospital operates a scheme which provides travelling physiotherapy and rehabilitation teams to rural hospitals; this paper describes the service to High River Hospital which started in 1969. A rehabilitation nurse and a physiotherapist from Calgary visit the hospital twice a week and assess patients for treatment. Much of the time is spent in teaching staff of the local hospital how to provide specific treatment and exercise. A member of the medical staff was appointed liaison physician. Twice monthly a speech therapist accompanies the visiting team. This co-operation between the two hospitals has been a tremendous help in improving patient care and in initiating new programmes.

130. LEE, R. H. and others. **Rehabilitation policy: a study of a regional rehabilitation hospital.** *Hospital & Health Services Review*, London, 1974, Oct., vol. 70, no. 10, pp. 346-350.

The role of Princess Mary's Hospital, Margate, a regional rehabilitation hospital, is examined. It is the largest hospital of its kind in England, its 215 beds accounting for one-quarter of such beds and the 3,522 patients for nearly half of the discharges from them. Patients were studied to obtain some information about their social backgrounds, to examine the problems caused by their handicaps and social circumstances and to relate these problems to the facilities of the hospital. Data were obtained from 1,912 patients' record cards and by means of structural interviews with 226 patients. Patients were divided into three groups: 'admission', being pre-discharge patients transferred from the Margate Wing of the Isle of Thanet Hospital; general practitioner referrals; and hospital referrals—129 hospitals in south-east England referred patients. Tables show figures for these groups and for diagnostic category, degree of incapacity and length of stay. A wide range of medical and rehabilitation problems presented and many of the patients were middle-aged or elderly; four-fifths of the total were women. It is felt that many of the needs being met at Princess Mary's could be met elsewhere and some patients might have received more suitable treatment elsewhere. The main conclusion of the study is that rehabilitation services sufficient to meet the needs of a district should usually be provided in that district and that Princess Mary's Hospital should reduce its services to south-east England and develop a more comprehensive local rehabilitation service.

## OCCUPATIONAL THERAPY DEPARTMENT

See also Abstract No. 150

131. CHOWN, J., HOLLIDAY, S. and FORD, B. **Occupational therapists' work patterns in a rehabilitation hospital.** *Hospital & Health Care Administration*, Prahran, Victoria, 1974, Aug., vol. 4, no. 8, pp. 19, 21, 23-26.

A study of the work patterns of seven occupational therapists was made over a 15-week period at the Caulfield Rehabilitation Hospital, Melbourne: for part of the time three third-year students took part as well. The main results are set out in tables which show: time spent in minutes by each therapist on various activities during one week; percentage of total therapists' time spent on various activities for each of the 15 weeks; actual time spent and time that ideally should have been spent in patient care during each week; absenteeism, expressed as a ratio of one therapist, for each week; number of patients treated by each therapist for each week; and the number of patients by type and by objective of the rehabilitation treatment. It was found that only 54 per cent of a therapist's time was spent in actual contact with patients (19.4 per cent went in preparation, tidying up, etc., and six per cent on staff meetings). It is estimated that 1.5 additional therapists would be needed to provide optimal care and allow for absenteeism.

## DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract Nos. 85, 138, 140

132. Het brandwondencentrum van het Rode Kruis Ziekenhuis in Beverwijk. **[The burns unit of the Red Cross Hospital in Beverwijk.]** *Ziekenhuis*, Utrecht, 1974, Sept. 18, vol. 4, no. 18, pp. 444-445.

The new ward block of the Red Cross Hospital, Beverwijk, includes a burns unit which can accommodate up to 14 patients. In April 1974 the hospital was the venue of an international symposium on the treatment of burns under the auspices of the Netherlands Burns Foundation. This paper summarizes the proceedings of the symposium and outlines the main features of burns injuries and their treatment.

## INTENSIVE CARE UNITS

133. ROYAL COLLEGE OF NURSING. **A selection of lectures from the symposium on intensive care ... June, 1974.** *Nursing Mirror*, London, 1974, Nov. 14, vol. 139, no. 20, pp. 57-60, 63-68, 71-80.

The lectures given at this symposium covered: ethics; keeping the balance between technical and basic nursing care; intensive care of bomb-blast injuries; psychiatric side effects of cardiothoracic surgery; pre-hospital coronary care; intensive nursing care of the cardiac surgery patient; and background to relationships and responsibility.

134. BROWNE, D. R. G. and others. **The Royal Free Hospital. 2. A mobile intensive care service.** *Nursing Times*, London, 1974, Oct. 10, vol. 70, no. 41, pp. 1580-1582.

During the development of the new Royal Free Hospital, London, the six hospitals in the group were without an intensive care unit (ICU) for a period of five months. To provide intensive care during this period three special mobile trolleys were designed and stationed in the accident and emergency departments of three of the hospitals. A photograph of the trolleys and a list of their equipment is given. The staffing and procedures of the service are discussed and details of the patients treated are given in a table. This service not only fulfilled its role as a substitute for a permanent static ICU, but also demonstrated the possibility that its use could be expanded for use in smaller hospitals, in satellite units of hospitals with an ICU, for use in wards within a hospital when an established ICU is full, etc.

135. MARTIN, S. P. and others. **Inputs into coronary care during 30 years: a cost effectiveness study.** *Annals of Internal Medicine*, Philadelphia, 1974, Sept., vol. 81, no. 3, pp. 289-293.

A 30-year retrospective study of the medical records of patients with myocardial infarction admitted to a medium-sized, voluntary, community hospital measured changing patterns of inputs into the care of these patients. There was a dramatic increase in the frequency of chemistry laboratory tests, X-rays and bacteriological examinations. These quantities had both statistically significant linear and graduate regression components, indicating an accelerated increase over time. There was a linear increase in electrocardiograms, sedative medications, and days of oxygen therapy. With these changes in input, there have been no significant changes in the length of stay or in-hospital mortality.

136. ZACHMAN, R. D. and GRAVEN, S. N. **A neonatal intensive care unit: a four-year summary.** *American Journal of Diseases of Children*, Chicago, 1974, Aug., vol. 128, no. 2, pp. 165-170.

The regional neonatal intensive care unit at St. Mary's Hospital Medical Center, Madison, Wis., includes a normal newborn nursery, an observation unit, and an intensive care unit. This report summarizes the work of the unit for its first four years from July 1968. Seventeen per cent of births enter the observation unit and five per cent are admitted to the intensive care unit. Of regional births 604 (or 1.3 per cent) were transferred to the intensive care unit over the four-year period. In 45 per cent of intensive care patients the reason for admission was respiratory distress: hyperbilirubinaemia occurred in 21 per cent and 10 per cent underwent surgery. Twenty-five per cent of patients admitted to the intensive care unit died. The survival rate increased with birth weight.

## SPECIAL HOSPITALS AND UNITS

### OUT-PATIENT

See Abstract Nos. 121, 141

## CASUALTY AND ACCIDENT

137. **Mobile casualty clearing unit.** *Hospital Equipment & Supplies*, London, 1974, Oct., vol. 20, no. 10, pp. 32-33.

British Leyland is introducing a single-deck bus equipped as a mobile casualty and communications centre that can give immediate aid to victims of major accidents. The Leyland Lifeliner is divided into three sections: reception area at rear; main treatment area with six 'casualty beds' each with its own medical equipment and electronic monitoring aids; and front section used as a communications centre and crew compartment. Stretcher patients arrive on an electric lift through a large hatch, which replaces the rear window, into the reception area. Photographs of the exterior and interior are included.

## DAY HOSPITALS

138. KING, B., SPAULDING, W. B. and WRIGHT, A. D. **Problem-oriented diabetic day care.** *Canadian Nurse*, Ottawa, 1974, Oct., vol. 70, no. 10, pp. 19-22.

A diabetic day care centre was established at McMaster Health Sciences Centre, Hamilton, Ont., in 1971. Services provided include assessment, education and treatment of diabetes and help with psychological and social problems that interfere with diabetic control. Care is provided with an interdisciplinary team of two nurse-practitioners, nutritionist, social worker, receptionist-secretary, and physicians with special training in paediatrics, internal medicine, psychiatry and ophthalmology. Details are given of the care provided and the 232 patients seen in the first 27 months are reviewed. Experience has demonstrated that most newly diagnosed juvenile diabetics can be managed without admission to hospital.

## CHILDREN

See also Abstract Nos. 16, 18

139. BURTON, L., editor. **Care of the child facing death.** London, Routledge & Kegan Paul, 1974, xi, 225pp. £4.95

This book is concerned with pinpointing the problems which exist for parents and those involved in the care of sick children, both in terms of accepting the facts of a child's illness, and in loving, supporting and stimulating him to maximum functioning within the limits of his condition. As well as general problems, more specific difficulties are considered, such as those of a child in pain and the child and his family who have to shoulder the burden of an exacting treatment regime. The volume also enumerates the many sources of help available for the sick child and his family.

140. MEYERS, A., COOPER, C. and DOLINS, D. **Child abuse: hospital combats neglected health crisis.** *Hospitals*, Chicago, 1974, Sept. 1, vol. 48, no. 17, pp. 46-49.

Yale—New Haven Hospital, New Haven, Conn., has developed a hospital-based system, DART, for the detection, appraisal, reporting and treatment of children believed to be abused, neglected or at risk of ill treatment. An ad hoc committee

consisting of paediatricians, social workers and others formulated policies and set out written procedures. It met as necessary to evaluate immediate problems concerning child in-patients and those for whom plans had to be made. A sub-committee met weekly to deal with children believed to be at risk and those found to be so had their medical record cover stamped DART. In 1967 a plan for expanded services was developed. It was proposed that the hospital should initiate a community-wide programme concerning child abuse, that the DART registry should develop relationships with other local hospitals and that a social worker should be employed to co-ordinate the activities of the DART Committee, provide consultation, offer follow-up home visits, provide casework, etc. All children suspected of having been abused are referred to the DART Committee for disposition and for decisions regarding reporting. During the past 3½ years 759 referrals have been made and 548 were believed to be at risk; the remainder were referred to the welfare department. Detection and appraisal has been accomplished but the further steps, referral for rehabilitation and treatment have met with limited success.

## GERIATRICS AND LONG-STAY

See also Abstract Nos. 72, 112, 151, 152

141. BYSTRAN, S. F. and others. **An evaluation of nurse practitioners in chronic care clinics.** *International Journal of Nursing Studies*, Oxford, 1974, Sept., vol. 11, no. 3, pp. 185-193; summaries in French, Spanish and Russian, pp. 193-194.

This paper describes the chronic care programme at the 250-bed De Witt Army Hospital, Fort Belvoir, Va., and analyses the nurses' role as primary health care providers. The chronic care programme, established in 1969 was designed to maintain high quality care to ambulant patients with chronic disease by means of nursing care and educational and emotional support. The programme functions in the internal medicine clinic and is run by two nurses. A nursing manual covering 10 common chronic illnesses has been developed to help them in their educational role. The doctor is responsible for the initial medical evaluation and for medical management decisions but once the patient is referred to the clinic the nurse is the primary care provider. Two new forms were added to the traditional medical record system—a master problem list, which serves as an index to the record, and a progress summary sheet. The system has been functioning for nearly two years. It has been evaluated by two different techniques: (i) studies of the patients' reactions; and (ii) a time and motion study of the nurses. Data obtained from questionnaires used in the studies are set out and discussed. Evaluation has suggested that most nurses should be able to look after between 300 and 400 patients. The system is rewarding to the nurse and it is generally well accepted by patients.

## CANCER

See Abstract No. 124

## CARDIOLOGY

See Abstract No. 135

## ORTHOPAEDICS

See Abstract No. 17

## UROLOGY

See Abstract No. 85

## MATERNITY

See also Abstract Nos. 86, 136

142. BAMFORD, F. N. **A maternity hospital adoptions clinic.** *Child Adoption*, London, 1974, vol. 76/77, nos. 2/3, pp. 23-26.

The medical group of the Association of British Adoption Agencies has stated that doctors who carry out many examinations of infants for adoption should have sessions designated for this purpose and that they should be a charge upon the National Health Service. An adoptions clinic has been established at St. Mary's Hospital, Manchester. Each week one session is set aside for medical examination of infants for adoption. The service is available without charge to any registered adoption agency and has been used by two local authorities and three voluntary societies. It is restricted to babies born at the hospital. The procedure is outlined and two years' work is reviewed and discussed. It is concluded that a medical service for children offered for adoption can be provided in the hospital where they are born. The numbers are unlikely to be sufficient to justify a separate weekly clinic and it would be inappropriate to hold one less frequently. In most cases the sole advantage of the hospital location is the ready availability of full obstetric and perinatal records. There are substantial additional advantages in connection with 'hard-to-place' babies and there is a case for a regional service to deal with them.

## PSYCHIATRY

See also Abstract Nos. 19, 36, 60

143. RAPHAEL, W. **Just an ordinary patient: a preliminary survey of opinions on psychiatric units in general hospitals.** London, King Edward's Hospital Fund for London, 1974, 48pp. £1.30

This publication reports an exploratory enquiry on the views of both staff and patients about 14 psychiatric units in general hospitals, mainly in London and Southern England. The report expounds the diverse views of over 300 people but does not often attempt to evaluate them. It covers: name and site of unit; size of unit, length of stay and allocation of patients; in-patient accommodation; staff accommodation; care and treatment; activities and meals; relationships; comparison of units with large psychiatric hospitals; and day patients.

144. HUNTER, R. and MACALPINE, I. **Psychiatry for the poor: 1851 Colney Hatch Asylum—Friern Hospital 1973: a medical and social history.** London, Dawsons, 1974, 264pp. £1.50

Colney Hatch Asylum was opened in July 1851 as Europe's largest and most modern institution with 1,250 beds. It was enlarged within 10 years to take 2,000 patients and when it was renamed Friern Hospital in 1937 there were nearly 2,700. The history of the hospital reflects social, medical and psychiatric progress. In this volume these strands are interrelated. While retaining local flavour it is also an introduction to the history of psychiatry in the last 125 years.

145. TOMALIN, C. **Riding at Leybourne.** *Health and Social Service Journal*, London, 1974, Oct. 5, vol. 84, no. 4407, p. 2298.

This paper describes the running of the year-old riding school at Leybourne Grange Hospital for the mentally handicapped, West Malling, Kent. Riding is now accepted therapy for the physically handicapped, but is a relatively new experiment for the mentally handicapped. The instructress of the school is herself a spastic, and there are two paid helpers. The school's annual running costs are £2,500 at present. Patients at the hospital, including spastics, are recommended for treatment at the riding school by the physiotherapy department. However due to staff shortages the numbers have to be severely restricted. Local volunteers are used to lead the ponies, and this brings the patients into much closer contact with the community. Patients also gain much greater confidence in their daily lives through riding.

146. RIDE, T. **Psychiatric patients at night.** *New Psychiatry*, London, 1974, Oct. 17, vol. 1, no. 3, pp. 10-11.

Psychiatric patients in hospital need more than simply custodial care throughout the night. This paper discusses the many aspects of care involved in the work of the psychiatric nurse on night duty. These include: communication between day and night staff; a planned programme of care; provision of a hazard-free environment; administration of drugs; observations of patients; and hygiene of patients.

147. VERSTEGEN, M. C. G. Een samenwerkingsmodel voor de zwakzinnigenzorg in de regio. **[A co-operative model for the care of the mentally handicapped in a region.]** *Ziekenhuis*, Utrecht, 1974, Sept. 18, vol. 4, no. 18, pp. 452-455.

While much is being done in the Netherlands for the mentally handicapped there is little co-operation between the various bodies working in this field: this leads to inefficiency and increased costs. This paper sets out a blueprint for a regional service for the mentally handicapped in which the importance of a multidisciplinary approach is stressed. All-important is early diagnosis to be followed by detailed study by a team of experts of each individual case at an observation centre (which could serve a number of regions). When the patient has been assessed he can, according to need, attend a toddlers' centre, special school, or sheltered workshop while still living with the parents, or be admitted to a residential unit or hospital. Throughout infancy, childhood, youth and thereafter there should be continuing consultation by the team of experts and patients should be transferred from one type of care to another as necessary.

148. **What is your score?** *Nursing Times*, London, 1974, Oct. 17, vol. 70, no. 42, pp. 1604-1607; Oct. 24, vol. 70, no. 43, pp. 1676-1677; Oct. 31, vol. 70, no. 44, pp. 1698-1701.

A checklist was published in 1972 [see *Hospital Abstracts*, Vol. 13, Abstract 448] as a yardstick by which hospitals for the mentally handicapped might measure their progress towards providing better care and facilities for patients and improving working conditions for the staff. This paper examines progress since publication of the checklist at Lea Castle Hospital, Kidderminster, Queen Mary's Hospital, Carshalton, Leaveden Hospital, Watford, Coldeast Hospital, Southampton, East Birmingham Group, and Harperbury Hospital, St. Albans.

149. CARR, J., HUTCHINSON, I. and CORBETT, J. **Rehabilitation in Camberwell.** *Nursing Mirror*, London, 1974, Nov. 14, vol. 139, no. 20, pp. 49-52.

Hilda Lewis House is a unit for severely mentally handicapped children in the grounds of the Bethlem Royal Hospital, a general psychiatric hospital. The unit has 24 places for children up to 16 years old; three-quarters of the places are occupied by children from Camberwell. This paper describes the day-to-day running of the unit and the care and treatment provided.

150. COLDRIDGE, H. **Progressive development in industrial therapy.** *Nursing Mirror*, London, 1974, Oct. 3, vol. 139, no. 14, pp. 58-59.

The emphasis of industrial therapy at Exe Vale Hospital, Exeter, is on the patients doing most of the work themselves, with supervision and minimal help only from the staff. An average of 150 patients are employed daily. A wide variety of work is done; payments vary from £0.50 to £2.00 per week and are reviewed monthly according to effort as well as productivity. Brief details are given of the work done with particular reference to the manufacture of furniture for the hospital.

151. WYNN-JONES, A. **The elderly in subnormality hospitals.** *Health and Social Service Journal*, London, 1974, Nov. 23, vol. 84, no. 4414, pp. 2716-2717.

A survey of geriatric wards in six hospitals for the mentally handicapped in the south-west of England reports on findings under six heads: types of patient sharing a ward; the accommodation; daily routine; personal amenities; the staff; and contacts within and outside the hospital. There are four main recommendations: (i) there should be a break with such institutional patterns as early rising; (ii) amenities should be improved and access to gardens and the outside world made easier; (iii) bedrooms should not accommodate more than four patients and there should be less crowding and more privacy; and (iv) there should be less segregation of the sexes—they should at least have meals, do occupation therapy and attend social functions together.

152. SILLEN, J. and others. **A multidisciplinary geriatric unit for the psychiatrically impaired in Bellevue Hospital Center.** *Medical Care*, Philadelphia, 1974, Sept., vol. 12, no. 9, pp. 766-777.

In 1968 a ruling by the New York State Department of Mental Hygiene meant that non-psychotic persons over 65 years could no longer be cared for by the state psychiatric

hospitals. This paper describes a geriatric evaluation and service unit established in 1970 within the psychiatric division of Bellevue Hospital Center. It's goals are: (i) to provide multidisciplinary supportive service to the mentally ill and at-risk elderly who are not eligible for the state hospitals; (ii) to identify those factors in the elderly person's life that increase his vulnerability to mental impairment; (iii) to assist in the co-ordination of existing services and facilities; and (iv) to stimulate community agencies to establish new types of facilities for the mentally impaired and frail elderly. The staff of the unit consists of a director (a psychiatrist and geriatric specialist), part-time internist, social worker, five community health workers, nurse clinician, two mental health assistants, secretary and co-ordinator. The functions of the staff and the methods of work are described and three case histories are given. These illustrate the many unmet health needs of the elderly in New York City. The need is emphasized for similar in-hospital, mobile and on-site as well as out-reach teams to deal with the problems of the elderly poor in large cities. Additional types of services and facilities are discussed.

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